

aactcaaaat gccccgaaat acaaggctaa aacctatac tactagaatg gccaaaatac 240  
aaggcctaga cgaaggaata gctatattta atatttacaa agataagcgg gctcatactt 300  
agcccatggg ctccgaaatct aacctaaaggc tcattgagaac cctagggcct ttccttggat 360  
... ..

<210> 17820  
<211> 315  
<212> DNA  
<213> Glycine max

<410> 17820  
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aattattacta tgccttaataa aatttggtya tcttagtaaa acataaagca ctttctcaaa 180  
tattaagatc aaataacatt cagcgtatcc aagagatgca gccaaaataa ataattgagaa 240  
cattaaaaaa ctgaattacc tcacttaaaa tgagaacccc tttcttggat gcttgacacg 300  
caacaaatcc atagctgaca agattcatcc catcccttac agatgtaaca agtgctacat 360  
ctaaattoga tgtga 375

<210> 17821  
<211> 423  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 17821

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ggcttctttt catacttgta tataaatgta aggtgtccct ttcatacccc cttttgtgtt 180  
gcttggacat gcttgtgagt tttttgtttt cctttctctt ttttgataat ttgattggac 240  
atgcttgtga gtttttgggt ttccttttct ctttttgata atttgattga tgtgtgagca 300  
atgatggta ggaggggaga agaagtgtct gaattctgag ctatggcatg catgcaaggg 360  
ccccttggty tccctaccaa ctgcagggac tcattgtgggt tacttccctc aaggtcataa 420  
tga 423



gaatctctag taatatcccg ctaaactgag taaactttcta atttcataca cagatgactc 120

ccccacttaa gaaaaacttc attttagaaa gatctacagc tatatcgccg tgggatatca 180

catgtcttag gaaactaagt ttccctaact aaaacttcga cctgggaact tagcttaaag 240

ctcctccttc cctccttcct cctccttcct cctccttcct cctccttcct cctccttcct 300

ctcctccttc cctccttcct cctccttcct cctccttcct cctccttcct cctccttcct 360

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<210> 17825

<211> 423

<212> DNA

<213> Glycine max

<400> 17825

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tgttaacaaat ctccagactt ggagttataa catgcagccc tcttcaaccc ttaccaccca 120

ctctgtcgtc atggttaagac ttatgaagcc caatagggtt tgccttttca atgtactctg 180

aaacaaaactc aatggctttt tcttcaatgt acctttcaac aatagaagct tcgggacgat 240

gtagattctt ggtatacct ttaagatct tcatgtatcg ctcaactggg tacatccgcc 300

gcaaataaat aggaccccaa catttgattt ctccagaccag atgaacaatt aagtgaacca 360

tgatgtcaaa gaaagtagga ggaaaatata tctccaattg gcataatgta attgcagccg 420

cat 483

<210> 17826

<211> 361

<212> DNA

<213> Glycine max

<400> 17826

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attcaaaaag gaatttacta ctactactac tactacagaa cgtatgaact tgaattgcta 180

gtaccatcct gaacgatgag aaataaatga taataagaaa gaaagtaact tcggatcttg 240

ttccccggc cgaactgcta catgccccaa gagaaagcgc cgaatgaggc gaaggaadac 300

gcaacggcgc tggggccctt gttcgggatg cgcggggcga accggaccgg agcgaaccgg 360  
c 361

<110> 17827  
<111> 4  
<112> DNA  
<113> Glycine max  
<400> 17827

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attacagaac agaatcggac atcagagtaa aaagttaatg tcgtttgaat tatgtcagag 180  
cttcgggtatt ccatttcgag cgtctcgata tattaaggga ctcaagtcaga cctccgagta 240  
aaaagttact gtctgttgaa tttctcaga gcttcgataa tcaatttcga gtgtctcaat 300  
atattacggc actcagtcag acaaccgagt aaaaagttat tgtcgtttga attatctcag 360  
agcttcggta ttccatttcg agcgtctoga tatactacgg gactcaatca gacatccgag 420  
taaaatg 427

<110> 17828  
<111> 360  
<112> DNA  
<113> Glycine max  
<400> 17828

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cgttttcgaga tatgacacaa caaaatcgga catcaaaatg aacagttaag gccatgccaa 120  
ttatgtcaca gcttcggtat tccatttcga gcgtctcgat atattacggc actcagacaa 180  
acatccgagt aaagaattac tggcgtttga attttctcag aacttcata atcaatttcg 240  
agtgtatcaa tatattacgc gactcagcca gacaaccgag tagaaagtga ttgtcgtttg 300  
aattatctca gagcttcggt attccattac tagcgtctcg atatactaca ggactcaatc 360

<210> 17829  
<211> 403  
<212> DNA  
<213> Glycine max



<400> 17829  
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 atgttggaat catgagaatt taagcctact aatttaagat ctttcaactg caattggctc 120  
 caaatattg aagatgatac ttatgggatt ttgacatga gtaataatg gaaatgaa  
 caattatg caattggat catatataa tttcaatga atgttgaaa gtaataaat  
 catcttttgt ttgtcttga atgttaagat ggtctccaaat gaaataatca catatatttt 360  
 tttcacatg catatatta atacaatgtc taacatttag atc 403

<110> 17830  
 <111> 233  
 <112> DNA  
 <113> Glycine max

<400> 17830  
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 ttgaaaaag agtatctctt cttctccctt cttgcctgt caataacctc attgaccacc 120  
 aaggtactat gaaaaagata cctatctttc aagaagggtt tttgcttttg atcaataact 180  
 caatttaata ccttcacaa cctattggca agtaattttg ccaatatttt gta 233

<110> 17831  
 <111> 396  
 <112> DNA  
 <113> Glycine max

<400> 17831  
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 atatctcag agctctgaaa ttgaatgttg aagctctgag ccaatacaaa cgatactgac 120  
 ttttactcgg gatgtctgat tgagtcctgt aacatctcga gacgtctgaa attgaatctt 180  
 gaaattctga gctaattcaa acgacaataa cgtttttctc ggatgtctga ctgagtcctg 240  
 taacatattg agacgtcga aattgaatgt tgaacctctg agctaattaa aacgacatta 300  
 accttttaac cagatgtctg attgagcttc gtaacttata gagacgtctg aaattgaacg 360  
 ttgaagctct gagccaatac aaacgacctt aacttt 396

<210> 17832  
 <211> 417  
 <212> DNA  
 <213> Glycine max

<400> 17832

.....

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 atgaagtctt aggaatggat cgagctgaac cataattact tctgtcttgg tgttgagaag 180  
 agtctcttct gtcaaaactct ttgggacctt ttccaacctt tgtgagcaca gaaatatctg 240  
 atccactctc agatctctga tggcccaaaa tgcctttcaa ttccatatag cctgttgaat 300  
 aatggggatc aaccacaaca ttgggaaagg caggcttctt gagattcacc ctatctctca 360  
 taaactcaag agcaaatctc tcaccagtct gtatggagta attaagtaca ggtttat 417

<210> 17833  
 <211> 282  
 <212> DNA  
 <213> Glycine max

<400> 17833

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 aagaaagact tgcctcctc ttccaactac atatgatgat ccagtatcgg tatgtcatgc 120  
 acatactaac atgacacgac gcattcatta tcatcatggt gtgtcacata cacacattta 180  
 tcaagtgtgat tgatttgaaa accatacgag agaagaactt gatcaaattg ttctgccact 240  
 gctatgaagc ttgattcaaa ctatgcatag attgaacaaa tt 282

<210> 17834  
 <211> 403  
 <212> DNA  
 <213> Glycine max

<400> 17834

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 tctcatatag ccttaatatc actaataact aatttttaac attctatcat tcaaaaagtat 120  
 ttctacagaa ataattgaatt aactttcaaa tatttttaaa ccatattgtg aaattgtgtc 180

taaaatcttt atttcatctt ctaaatcaca aaaatgataa taaagttcaa aactaattgt 240  
 taatcaggat aagaatcacc catgagggaa aaaaaacctc tataaaggtc atttacatta 300  
 aaataaaact agagataata cagattatta taaaagataa attctatatt ttaaaatcaa 360  
 aattatcttt atttcatctt ctaaatcaca aaaatgataa taaagttcaa aactaattgt 420

<210> 17835  
 <211> 406  
 <212> DNA  
 <213> Glycine max  
 <400> 17835

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 aaattaaata tttctatttg ataggaattg tatataagca ttaagaaatt tataagactt 180  
 ccgcaccata ctttaactaag ttataagaaa acctattgga tgcctttttt ttggtgatag 240  
 gaaatcggat gttgaagttt aaatgaaaaa aagtaaaact ttctcatatt attgggttagg 300  
 aacattaatg gtgtaaattt taataaatta cgacatacaa caacataaat aataaaaaac 360  
 acttgtaaaa ttatatcata cgctgagata atcaaattcg ttgagataac taaaaaaca 420  
 tagatt 486

<210> 17836  
 <211> 406  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 17836

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 ctaatttcca gctgcccttc attctggaaa ctaatgcttc cgacactggt attggagtag 180  
 tattacatca gaatggocat ccaatagcat ttttttccaa gaaacttyca cctagagtgc 240  
 aaaagatata cgaactaatt agagagatgt tagcaattgt tgaagctata gctaagttca 300  
 gacactactt gctgggacac aaatttatta tcaaaaactga tcaaaaattag tcaagatgt 360  
 atgttgatgg atggaacaa cctacagac acctgaacaa caacag 426

<310> 17837  
 <311> 411  
 <312> DNA  
 <313> Glycine max

ctggagacac ccgctacaa tcttgacgag aaaaaggtgca aggtgacac cttgccttag 60  
 tctctctta ggagtaaac ccttagatgg acctccatta agtaaaatgg atatactgc 120  
 atattttaga caaccattta ttcatttctt ccagctttca caaaatccca tctttttaag 180  
 catgtagtca agaaaaccac aagaaaacga gtcatatgcy ttttcaaagt cggctgtgaa 240  
 gaccatgcaa ggtttacttc tagatttggc cccagctata gtctcatigg caattaaaac 300  
 accatgaaga atgtgtcttc ccttcataaa agctgtgtgc ctttcatctt taaggtgagg 360  
 taatcacgca gccagcctct tggccaaaac ccttgcata atttatagac a 411

<410> 17338  
 <411> 427  
 <412> DNA  
 <413> Glycine max

<400> 17338  
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 cttgagttga cataggtctt ttttaaggct ctgctcgact tacataaaaag tctgacttac 120  
 gagcctattt aaaagcttgc ttaaagacgt cttttattaa ttaattattt taaaacctag 180  
 tgaataacta actaaaaaaaa gaaacttata aaatttcgta taaataatgt acaaatctaa 240  
 aaataattga taaacaaaat tatattgaat tcaagtcgtt aaagcacaaa gtatataaaa 300  
 aaaa:aaaaa tagcataata ttaaaaaatg tatggattag agatgattta cactaatata 360  
 gccaaacaaa aattattatt agttaaatta acaattttta atccaatttt tttaatatat 420  
 atttata 427

<210> 17839  
 <211> 309  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations



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 tatactacgg gactcaatca gacatccgag caaaaagtta ttgtcgtttg aatttgcctca 360  
 gagcttaggc attcaatata gagcgtttcg atatatagc ggactgaa 400

<210> 17842  
 <211> DNA  
 <212> Glycine max

<400> 17842

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 ttcttccac caagaggcct ttaaaatgat tttttttaga gcttctctca ttgacctgt 180  
 taatccctca gccacaatat tgaacaggag tggggctaac agatcccctt atctaagtc 240  
 cttttgaggg aaaaattcag ctaaaggact cttattgato aatatggaga caaaagctga 300  
 totaagacat cttttgacct aagtaatcca cttagggtag aatcccatcc tctaagcat 360  
 atataccaga taatccctac taactgaatc atgtgccttc tcatag 400

<210> 17843  
 <211> 432  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 17843

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 tctcaatttg atctttgact ctctcatgaa gcttcttcac atagtcgcc tttgcttgac 180  
 cttctttatg cttaaaaaaa gaaacattag gcataggcaa aagatcaaga ggagttagt 240  
 ggttaaaaac ataaacaact tcaaaaggag aacaattagg ggtgctatga acagctctat 300  
 tgtaaacaaa ttcaacatgg ggtaaacaaag cttcccaagt ttttaagttc ttctcaaaa 360  
 ctgtcttaag caaagtctcc aaagtctat taacaacttc tggttgccc tgggtttgt 420  
 ggtgacaaat gg 480

<110> 17844  
 <111> 404  
 <112> DNA  
 <113> Glycine max

<114> unsure at all n locations  
 <115> 17844

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 ttcgatgca attatctcat gcatllaggt accatcctaa tatctaaagc taatgggcaa 120  
 gaaaaaataa tagtaactgt gtgtacatct tctcaagcct tctgaaatgc gcgggaagaa 180  
 acccatgca gaagcctgac aaatcccaag aaactaagct tcccatctga gtgccttata 240  
 caacccgaa gtattacatg aacaggtact gatggactaa gcccaagttc ctgaaacgtg 300  
 tcaattgtaa agagctcagt accattatac atgtgatgaa ggattatact atatgcactc 360  
 gatagaaaat ctcattagag gtatatctat catgtngata aaat 404

<110> 17845  
 <111> 438  
 <112> DNA  
 <113> Glycine max

<123> unsure at all n locations  
 <400> 17845

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 tcacaaagac ttaatcctca tgacagagaa gcttaagggt aaagttccct tgaggttggt 120  
 gaaggccaag tgcaaaacgt gcaagccaga gataatattg aagaaatccg ggagggaggg 180  
 agcctatgat gttggcagag ttggcggaga agttctgaag tttggaagct tctcagagag 240  
 tataaggaat ctcccaagcc tgatttttct gccctgaaag atttgcaagt ttgagcttg 300  
 agtcttaaca aactcactgg tccagttcca gcttctttgt tgggtctttt gtggctcaaa 360  
 gttgtgaatn tgaccagtaa ctgttttctc gggccaatgt ctgtgtttgc tcattngtc 420  
 gaggtggata atgcccct 438

<210> 17846  
 <211> 397  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 17346

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 attatctctg aagttaaaaa tcatcagaa agcatggagt caactcacaat taatgggaaa 120  
 attatctctg aagttaaaaa tcatcagaa agcatggagt caactcacaat taatgggaaa 180  
 attatctctg aagttaaaaa tcatcagaa agcatggagt caactcacaat taatgggaaa 240  
 acctcttaa aaattttct tcttagtagt ctattatcat tggctgtttg tgcaggatct 300  
 acctcgaaca tttctgtgtc atcctgcttt ggaagaggat ggtagatatg ctttgagacg 360  
 attacttact gcctatgctc gacataaccc ctacgtt 397

<210> 17347  
 <211> 413  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 17347

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 ctttggatag cctcttatta gcattggcca gaatctcagc cagttgatct atggcaggaa 120  
 catgaacaac attgagttgt ttggtgagaa gtttctctca cacaaaaaat aaatccagct 180  
 ccctatgctt gggttttgag tgaaaaacag gattatgagc taatgaaaca attctgggtg 240  
 tgctcacaaa aataatagga gtagtgttaag ctacttggag ttcagaaaga agagactgaa 300  
 tccaagtaac ttctgtctga atacgagcca tggctctata ntttgcctca ataactgacc 360  
 ttgaacaac tgattgette ttgaccacc aagagatgag tttatgtcca agaaaaat 418

<210> 17348  
 <211> 426  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 17348

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 gttgacttaa ttaacatcgc tttttcaaaa acccgatgtt aacattgatt tcttaatttt 120  
 ggttttgaaa aattgatgtt aacatcaagt agttaacatc ggatattgaa aaaccgatgt 180



taaetttaga aagttaacat cggtttttaa aagaaccgat gttaacattg acatgttaac 240  
attggttttg ttttaagaaac cgtttttgtc tcattcataa gttaaaaacc aaaaatccat 300  
tccccccat cggatcagtt accaaaaacc tttctccctt tcttcccat cgtccacgt 360

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<430>

360

<210> 17349  
<211> 315  
<212> DNA  
<213> Glycine max

<230> unsure at all n locations  
<400> 17349

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taagttaagg tggcatccac acgcggcgca cgttagcgag cgcgggttcgt tggggtttga 120  
gaaagaggag ggcattgaact caccgcacc cccaagcgcg tggccaccaa tgcctggctgc 180  
atggtttttg aggcactctt tctaggcaac cgcgtagac ggtggctgnt gggggggtga 240  
cacggtggtg ggggtggtgat ggtgatggc cttgaggag cggttgggtg tgaaagggtg 300  
tggtggggta cggac 315

<210> 17350  
<211> 337  
<212> DNA  
<213> Glycine max

<400> 17350

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acaatagcat cactcctggc actaaaatgc tgggagtttg aagccatctt ctgaattaaa 120  
ttctcggctt cagcaggggt catgtctcca agggctccac cattggcagc atctatcata 180  
ctctctctca tgttactgag tcttcacaa aaatatttga ggagaaactg ctcagaaatt 240  
tggtggtgag ggcataatgc acataatttt ttaaactctt ccagttatc atataggctc 300  
tctctctac gctgcctaatt gcttgagata tctttcttga tgaatgtgtt cctggaaaca 360  
gggaacaatt tttctaagaa tactctc 387

<210> 17851  
 <211> 425  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400>

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ccttccatg caacaacctg gagcaattga gcagcctgga acttatgctg caaatatgta 180
caatagacct tctcaacctc agpagcaaaa tcaaacacat gagagcaagt atgaccttct 240
cagcaacaga tacaacctg gatggaggaa tcaccttagc cttagatggc ccagccttca 300
gcaacaacaa caacagcctg ctctctctct acaaaatgct gctggcccaa gcagaccata 360
cattctctca caaatccaac aacagcaaca acctcagaaa cagccaacag ttgatgcctc 420
tccac 425

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<210> 17852  
 <211> 398  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 17852

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gtaactgctt catgggcctc tggtgctgt tctgccttgc taacatagct tgtaacatga 120
gaaaattgac ccctctcaat gctgaccaga attgcactca tacacatag aataatgtgc 180
tttgatgtag tgcaataatc ccgagtacgg acataacttt taaaagcgtc cccaattga 240
ccatgagcat agtaaaagtc tccaaaatca ttgaatccca tctaatgct tctcttaatc 300
aagtctgtct gcaaaaaata aatgcgatga acaaatgac aggataagga atcaatgata 360
nattacgaaa aaacaggtct taccaaaata ctctctat 398

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<210> 17853  
 <211> 433  
 <212> DNA  
 <213> Glycine max

<403> 17853

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ctatcaaaga tgaatgtag caatttatga acttgctagc tgaaggaag cactaaaaga 120

cttcaatttt ccaattttaa tctgggaaa gatgtctatg ataatcttt ccaatttttt 180

cttcaatttt ccaattttaa tctgggaaa gatgtctatg ataatcttt ccaatttttt 240

aaagctcaat agagattctt cagccaacaa acacaaagtc gaattttagc ttaaaatgta 300

tgtacaaaat ttgtgtattg atpattctga tacttttgca cctgtgttca gatttagatc 360

aatctgattg gtgttaatag tggcttcaca aaagggttgg aaagtcttcc aatttagatg 420

aaaattagct ttt 483

<210> 17854

<211> 419

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 17854

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tgcattgatg ttgtcaagt atccaacagt ggaaagaatt gatccatgaa gtttattacc 120

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naaatcattt tttagcaatt tgattattgt gagagaatga agtcttccca actctcagg 240

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atagttgaag ggattgcacc aaagagattg ttggatgaca catcaagttt aacaagattt 360

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<212> DNA

<213> Glycine max

<223> unsure at all n locations

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 <213> Glycine max

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<212> DNA  
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<212> DNA  
<213> Glycine max

<23> unsure at all n locations  
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<212> DNA  
<213> Glycine max

<400> 17862

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gaatttddga aggcacaaga cggaaacccg gaagactgtc tcttttaagg tggatgaatgc 180

tctcgtagcc aactccgacc accagaattg acccttgcac agcaactgtg agagagggcg 240  
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<113> Glycine max

<400> 17863

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<210> 17864

<211> 370

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 17864

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<210> 17865

<211> 435

<212>	DNA
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<213>	Glycine max

0223,       insure at all n locations  
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 <111> 403  
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 <113> Glycine max  
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<210> 17870  
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<223> unsure at all n locations  
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 <213> Glycine max

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 <213> Glycine max

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<210> 17877

<211> 382

<212> DNA

<213> Glycine max

<214> unsure at all 4 locations

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<211> 369

<212> DNA

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<223> unsure at all n locations  
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<213> Glycine max

<400> 17884

tggttggcat aaattcatga tccgagaata taatatagag aattqataga atttgggttgt 60

atggttttgc tttttatggc tttttttttt tttttttttt tttttttttt tttttttttt

tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt

tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt 120

tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt 180

tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt 240

tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt 300

<110> 17885

<111> 384

<112> DNA

<113> Glycine max

<123> unsure at all n locations

<400> 17885

aggttcaacc aaggtgagat ggaccatttc aagtgccttga aagaatcaat gacaatgcctt 60

acaaagttga actgcccggg gagtataatg ttagttccac cttcaatgtc tctgatttat 120

ctcttttttga tgcagatgga gaatccgatt tgaggacaaa tctttctcaa gagggagaga 180

atgatgaaga catgaccaag agcaagggca aggatccact tgaaggactt ggaggaccta 240

tgacaagggc tagagcaagg aaagccaagg aagctcttca acaagtgcctg tccatactat 300

ttgaatacaa gcccaagttt caaggagaaa agtccaaggt tgtgagttgt atcatggccc 360

anatggagga cttaatgaca ccac 384

<110> 17886

<111> 370

<112> DNA

<113> Glycine max

<400> 17886

aggttcaacc tcaagtatcac ttccaggggtg ctggaactac ttccatgga cttgatgggg 60

cttatgcaag tgaagaagcct tggaggaaaag aggtatgcct atgttgttgt ggaatgattc 120

tccagattca cctgggtcaa ctttatcaga gaaaaatcag acacctttga agtattcaag 180



gagttgagtc taagacttca aagagaaaaa gactgtgtga tcaagagaat caggagtgc 240  
 catggcagag agtttgaaaa cagcaagttt actgaatact gcacatctga aggcacact 300  
 catgagttct ctgcacccat tacaccacag caaaatggca tagttuaaaq gaaaaaacag 360

<210> 17387  
 <211> 375  
 <212> DNA  
 <213> Glycine max

<400> 17387  
 agtttcaaaq gcttagacaa gggactatga gttttgaaga atatagacaa aaaatiggaat 60  
 tactcttttt aagagctgga cttatggagg agyaaagaac aagcatagct aggttcttta 120  
 gttgggttaa tatggaagtq agggacaagg ttgaactcct tccatatagg gacctagatg 180  
 agctagtcca actttgtata agagtggagc aacaacttaa aagaaagcct tcttcaaaat 240  
 cttatggctc tcaactttat ccaaggaagg accaagccta tggattttta ggggctgcac 300  
 ctctcaaaacc caaggaagat aagggttaaga ccatagagaa atacacccct aagactagtt 360  
 cccaagaaag gacta 375

<210> 17388  
 <211> 384  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 17388

aggtttcttn ccagcttcaa actttaatct tcatggaact catgttggtt cccctatctc 60  
 ttacccaaaat tgcacttact cctaaaaaag aacattggtt tataacaaat taaggaattt 120  
 tcaactaaatg attttattaa caaataaatg tttaaagatg agacatagaa tccattctcg 180  
 attgtaagtt ctttttaatc taacaaaataa gttcataatt ttcaacttat cagagaattg 240  
 tctaactact aatatatata ataatagtaa ttccgataaa gatattcata gataattata 300  
 ctagtatcgt ataacagttt gtaatatact ttgtaagtag attttatgat agtggtttcg 360  
 attaanaagt aaatttcaac aatt 384

<210> 17889  
 <211> 365  
 <212> DNA  
 <213> Glycine max

ttttaaataat aattataaat aaagaadtaa gaaagadaat aaaaatata aattatata  
 gaaataaaccg aattgatggg attaaactca acattccctcc atttaaagga aagaatgac 180  
 gaggagccca ctgggagtgg gagatgaaaa tagaccatgt ttctccatgc aacaactatg 240  
 aaggaggacca gaaggtgaag ctggccgcca cggagttttc cgactatgct ctgtgtgtgt 300  
 ggaacaagct acaaaaggag agagcaagaa atgaagagcc aatggttgat acatggacgg 360  
 agatg 365

<210> 17390  
 <211> 426  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 17390

agtccttatt caactcaaac atggcaagaa gacagtatat actaggcaact gaagatttct 60  
 taaaccttat caccctgacc gactattgaa gaaagctttt aatgaaagct aggagaataa 120  
 aagtgtctct tgaccattag ctagaaatga agtttatgat caggtgaagg acatcataac 180  
 tatctttggg aagacccaaa gccatcatct aagactaacc tatggaagaa aaggtcaata 240  
 tttttatct tccatactgg ttgatctac atgtatgtca ttgtctagac gtaatgcatg 300  
 tggagaaaaa tttttgtgat agtttaattg gaacccttct taacattaaa ggcaagacaa 360  
 aggatgggtt gaaatgtcat caagacctgg ttgacatgga aatagagag caattgcatt 420  
 tcatat 426

<210> 17391  
 <211> 323  
 <212> DNA  
 <213> Glycine max

<400> 17391

tacattacat atattacagc atttcagtgc actgtgaagt gtaaaacaca atttagattg 60  
gatagaacag ataaagggag aatgttcaat taccatagca tggcaatagc tgaccccaga 120  
tatgaagtcgc tgaagaaga atccagcctg aatcataaca acggggttaca aactatccca 180  
tatttcctgg taaaagcgc agctctg ag ctatctca agagg ctct ctatagatca  
tattccatta caatagtaac atg 333

<210> 17892  
<211> 414  
<212> DNA  
<213> Glycine max

<400> 17892  
agtgtgttta tatttgcaac ctttctgatg ccagaaaacg ttatcaatgg accggaaaca 60  
acatcgcggtg ttactaaata cctcatgtaa ggttctgcat gagcctccaa ataaggaagt 120  
ccttcgatct taagtatttg atcatagaca cccttggtga agctgtcagc caaggatttt 180  
gagaccaata agactaacat cacaagtgga agtaacaaga gatcattaga gagctcaagc 240  
aatatgacac aaagagacac tgtcattctc atggtgccac caaggaagga agcagctcca 300  
agtaaggcaa agagtctctc gtcgagatcg gtaatcgttt cgaagagccg gtogaataga 360  
ctgccatagg cagcaccagc acgtatgacc ggaatgaaca gcccggatgg aata 414

<210> 17893  
<211> 445  
<212> DNA  
<213> Glycine max

<400> 17893  
actattcaca caatttaaca agaaacaatg aattatcaac ttgaaaatt aattgcattc 60  
ccatacctag atctccttct aaattccacc gaatttatat atgtttaaat gcattggaagc 120  
aaggattcaa gactagctgt ggatctttta ttgggtcttga ttggtgtttt ttgaaagget 180  
actatggtga tcatttgctt gcagcagcgy gacaagatgc aaacaatgca ttttttgtga 240  
ttgcttatgc ggtagtaaat gtggaagata aagataactg aaagtcttc ctacattgt 300  
tacetgaaga ccttgagagc tgaagcaat atggetgaaa ttttatgtta gacatccaaa 360

aagtgcatt caattgtttt gctttgatca attcatatat agaattgtgt aattctgatt 420  
 goctgcatgc atatgtgata gtttg 445

<210> 17894  
 <211> 454  
 <212> DNA  
 <213> Glycine max

agttttcttga gagagtcaaa gatcaaatg agaggaaaaa taaaagctat gctaaacaag 60  
 caaacaagg gagaaagaag gttgtcttcg aacccggaga ttgggtttgg gtgcacatga 120  
 gaagaagaag gtttcggaa caaaggaaat caaagcttca acaagggyga gatggaccat 180  
 ttcaagtgtc tgaaagaatc aatgacaatg cttacaaaagt tgagctgccc ggtgagtata 240  
 atgttagttc cacttcaat gtctctgatt tctctctctt tgatgcagat ggagaatcgg 300  
 atttgaggac aaatctctct caagagggag agaattgatga gggcatgacc aagagcaagg 360  
 gcaaggatcc acttgaagga cttggaggac ctattgatga ggacatg 407

<210> 17395  
 <211> 454  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 17895

tgaatcggac atccgtgtga aaagtattga cgatttttat ttctcttgag ctcccggtga 60  
 ncaattgoga gcttctcgat atgtgatttg cctgaatcgg acatccgtgt gaaaagttat 120  
 accagttgaa ttctcaaga gcttccgttg ttcaagtttg agcgtctoga tatgtgattt 180  
 goctgaatcg gacatccgtg tgaaaagtta tgaccatttg aatttctcaa gaccttccga 240  
 tgatcaattt cgagctcttc gacatattat ggcaccgaat cggacatccg tgtgaaaagt 300  
 tatggccatt tgaattcttc gagagtttac gatggttaag ttcgagcgtt tccatatagt 360  
 atacagctga atccgacatc cgtgtataag atttgaccat taggattcct cgagaacttc 420  
 cattgttcaa tctcgagctt ctgcacatat taag 454

<210> 17896



[illegible]

4110>	17900	
4111>	474	
4112>	DNA	
4113>	Glycine max	
4400>	17900	
ctcagaacac	tcaagcttgg	aacctaigtg ggtgatatgc taagatggac gtgttgactt 60
gtttactcct	ctaataaaga	gtacaacaaa ttttggtgtt gatgatttag gttttctctt 120
ttttttcttt	gttcatatgc	aaagtttcatt tttttctctt atttgcctct attctatctc 180
ctatctctat	atatttggca	tgggtgtctt cgaatctctc acgttccaat tgagatgaga 240
gataagaatt	tatctaatat	tctgtctctt ttatatactc tataaataaa tcacattttt 300

atactataat taaataataa gataaattgt ataaacttta gcacaataga aatgcagacg 360  
 cgagaactat tactaaaaat acatatagaa tttattaatt ttgggtaata gtttaacaaaa 400  
 atcaaaaadag tctagtgag atggtgacat tttaaaaagt taataacaaa agag 474

<210> 17901  
 <211> 442  
 <212> DNA  
 <213> Glycine max

<400> 17901  
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 aatggggagc tagttgtaga tataacaagtt ttgctatgct ttttcattgg aaaatatggt 120  
 gatgagatac tgtttgatgt agtccttatg gagcctagca atctcttaag tggaaggcct 180  
 tggcagtatg ataaggatgt tgttcataat ggtgtcacaa acaaatttgc atttgtatat 240  
 aaaaggaaaa aggttacctt cacacctatg tctccaagtg aggtttgaaa ggatcaaata 300  
 atatatgaga gtgataagag aacaagagac taaagtgaaa ctttgttaaca taagacacca 360  
 aactgaaaca tagataaagt atcttattac acaatttgac tattattact a 411

<210> 17902  
 <211> 442  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 17902

tatagttact ggaggagagaa taaaacaatc caaaatttat tgtaccttc aagtaaciyaa 60  
 gaattctttt tgcggctttt agattaggag aggtaggagc ctccataaaq cgacacacaa 120  
 ctcccacgcg atatagaata tggggccttg tatitggttag ataccttana ctcccacaa 180  
 gactcttgaa gatcgaggag tctaccttct ctcccttcac aaactttgat aacttcaagc 240  
 cadcttccat aggtgtgttc acaggattgc aatcaagcat attaaatttc ttcaacactt 300  
 ctittgtgta cttttcttgt gagacaaaqa tacaccttc tttgtttgct tcaattccat 360  
 tcccaghaa tatgacatga gtccataac tgcctatatc aattcacgag acatggactc 420  
 ctitgaagtct tcaaacacaaat tt 442





<213> Glycine max

<223> unsure at all n locations

<400> 17905

agctttgagc caattcaaac gacatattct ttttactcgg atgtctgatt gagtctctga 60  
tgaatctcga ggtttctcga ggtttctcga ggtttctcga ggtttctcga ggtttctcga 120  
tgaatctcga ggtttctcga ggtttctcga ggtttctcga ggtttctcga ggtttctcga 180  
tgaatctcga ggtttctcga ggtttctcga ggtttctcga ggtttctcga ggtttctcga 240  
tgaatctcga ggtttctcga ggtttctcga ggtttctcga ggtttctcga ggtttctcga 300  
tgaatctcga ggtttctcga ggtttctcga ggtttctcga ggtttctcga ggtttctcga 360  
tgaatctcga ggtttctcga ggtttctcga ggtttctcga ggtttctcga ggtttctcga 411

<213> 17906

<211> 477

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 17906

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tcagacatcc gagtaaaaaat ttattgtcgt ttggattggc tcagagattc aacattcaat 120  
ttcagagcgtc tcgatatatt acgggectca atcagacatc cgagtataaa gttattgtcg 180  
cttgaattgg ctcagagctt caacattcaa tttcagagct ctcgatatat gaccggactc 240  
aatcagacat ccgagtataa agttattgtc gtttgaattg gtcagagct tcaacattca 300  
attttgagcg tctcgatata ttacgggact caatcagaca tccgagtata aagttattgt 360  
cgtttggatt ggttcagaga ttcaacattc aatttcgagc gtcgatatat attacgggac 420  
tcaatcagac atccgagtaa aaagttattg tcgtttgaat tagctcagag cttcaac 477

<213> 17907

<211> 462

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 17907

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[illegible]

tttagcanat	ntaattacag	aagcaggtgc	aaatcgtgta	cttgcttggtg	acctccatto	60
tyggcagtec	atgggctatt	ttgatattcc	agttgatcat	gtgtatggcc	aggtaacgga	120
ttattatgtc	actagcatat	agtaatagca	tggaagaata	aaaagcattt	aatctattaa	180
actcaaacaa	acatggccttg	gatgtgtgtg	atattagtaa	tttgtaattg	atagtccato	240
caataaatttg	ttaatttatt	gtatttatgc	atctcaagtc	tgaattgaaa	tgaagggaca	300
accttctgga	aaatgcttta	ttttactggt	tatagttata	tgatcattta	aatttaagat	360
ttctgtagta	aagaaaacttc	aaatctagtt	ttcttttagac	gtgctaaaat	cttctattgt	420
ctatatttato	ccagatccagt	cacacatgga	ctctaatg			458

agtttggtaat	tcttgatccg	cagataacat	aggtggtaaa	gtttgggact	ggaaagagtc	60
accaatggct	ttcttgagga	aagagaaaata	aaatgtcaaa	tgaattttac	tgtcaaatcg	120
aaagatccaac	ttataaagaa	caacaccaac	cttttttaac	acctgaaaaa	gaccataaaa	180

ccaaggggag agtttttcat taatcctttt agccaaggat cttctcttat aaggttgcat 240  
 cttcaagaac acccaatcac cgaactgcata ttctatgtct cggtgycatt tgttggcatt 300  
 tttccacatg atatcttgag acttcaacaa atttctctct agagtacaca ataattcatt 360

cttctcttat aaggttgcat

<210> 17911  
 <211> 450  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 17910

tattagocaa cttgcttctt cactagcagt tggtagtget atcatctcag attccatagt 60  
 ggaactgagct aagatcattt gtttctttga cttccaagaa acagccccac cagctatget 120  
 aatatatag ccgctgggttg ctttggaatc atctgagaga gtgttccaat ctgcctcgtt 180  
 gtatccttca agtacagcgg gaaacctttt ataattgtaat ccaagattta tggttctttt 240  
 aaggtacctc attacctttt caatagcgtg ccagtgtctc ataactaggtc taetggtaaa 300  
 ctgcataat aatcccacaa cataggetat gtccggtcta gtacaatcag tggcatacct 360  
 aaggtgcaca atgatacttg cgtactcagt ttgtcgtata ccttcaccag tgttcttaaa 420  
 cagttntaca ctnggatcat atgggtgtact 450

<210> 17911  
 <211> 455  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 17911

gaacttaaat ctaagcttca tgtaaagatg ggagaagagg gatttattac ttctgaactt 60  
 atacacacag atctaattggg gtgcacaaaa acacctagat atagtggatg tatagatact 120  
 atggcagtat atgatgatta cactcgatat acttgggttg atttccctaaa agagaatagt 180  
 gaagttacgc ataagtcagn tctttctctt gatgtggtgg agaaagaccg tgaatgaaca 240  
 atcaaatgct tgaacagcga ctatcgatga gagtccaagt caacagattt cacagtcttt 300  
 tgtcttgaga aaatggatcc atatgcaatt tacttgtcca gatacaatgc aacaaaatgc 360

agtggttgag aggaaattat ctcatctaac ttagtgagc ttgtcatgga tacatgacaa 420  
 aaatctgctt cgagagatat angcagaagc aattc 455

<210> 17911  
 <211> 437  
 <212> DNA  
 <213> Glycine max

agtttattct aagttcaacc taccaccctc agactgatgg ccaaactgaa cggaccattt 60  
 agtcaactaaa ggacctttta agagcatgtg tattagaaca aaaagggagt tgggagtgtt 120  
 ttctgttgtt gatagagttc acctataaca atagttttca ttctatcatt ggcattggctc 180  
 catatgaagc ttgtatggt agaaggtgta ggacacccct gtgttggtta gaacctggag 240  
 agaacttcac cttaggacct gaagtggta cacaacccac tgagaaggta aagttgatcc 300  
 aagagaggat gaagattgct ctgagttagc aaaagagtta tcaagataag aggaggaaaag 360  
 acatggaatt cgaggctggt gatcatgtat tcttgagagt cacctcttgg act 413

<210> 17913  
 <211> 437  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 17913

ntatgcaagt cagcttttcaa gaggcattct ggagatttct tttttttcat atcngcgcaa 60  
 aatchcttga attatgaaga tgttgtccat catctttttg ttcttaatga aagcagtttg 120  
 agttttccca ataatagtct caagcactgg ggctatgggg ttggccagaa ttttagaac 180  
 aatcttgtat aacaaattac agcagatat gggcttaata tgattaacct gtgaggcctg 240  
 atcatgctta ggaataagcg caataatagc atggttgagc tgcttttagaa ttctctcagt 300  
 tctaaagaat tcattatccg cttcaaagat atcatgacca gtgatattcc aagccttctt 360  
 gaagattaaa acattgaac catctggccc aggagctcta ttgttattca tcaagacat 420  
 aacgttccaa acctctt 437

<210> 17914



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gcatttttac ttctctatgg atgatttcct taataactct agggaaatgag aagacttttag 180  
agcatgagga tctccacat ctgctactg atgacagtgt gcatgggatt ttgccaactt 240  
ttcaaaata tttttttt tttttttt tttttttt tttttttt tttttttt  
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<210> 17917  
<211> 407  
<212> DNA  
<213> Glycine max  
<233> unsure at all n locations  
<400> 17917

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gcacagtggc caaagatgca tgggagatcc tgaaaatcac tcatgaagga acctccaaag 120  
tgaagatgto cagattgcaa ctcttggcta caaaattoga aaatctgaag atgaacgacg 180  
aagagtgtat tcatgaacta cacatgaaca ttcttgaaat tgccaatgct tgcactgect 240  
tgggagagag gataacagat gaacagctgg tgagaaaagat cctcagatcc ttgctaaga 300  
gatgtgacat gaaagtcact gcaatagagg atgcccaga catttgcaac atgagagtag 360  
atgaactcat tggttctctt caaaccttng agctatgact ctgggat 407

<210> 17918  
<211> 370  
<212> DNA  
<213> Glycine max  
<233> unsure at all n locations  
<400> 17918

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aactatcgty aatgggagag aaatgttcat ctaaagcata caagccctta atattatcaa 120  
atcttaaaat tggagctcct agggagcaaa ataatgtgag tctctctagag agggcatcaa 180  
ctaccacatt tgttatcccc ttttctatt cgataacata tggaaaattgc tctaggtact 240  
ctaccacatt tgcattgctc ttttctaaat cgttttggcc tctaatgtac ttaagtgatt 300

gatgatcaact atgaatgaca tatcccttgg aaacaaagta atgttcccaa gcttggaagg 360  
ctattattaa 370

<210> 17919

<211> aa  
<212> DNA  
<213> Glycine max

<400> 17919

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acggaagcta cagagaaatt caaatggtca atacttcgaa ctccggaggtc ctattaaggt 120  
gcataatata cttagacgtc caaaatttta caatggaagc tctttggcta taaaaatggt 180  
cataactttt cactcgaagg cccgattaag gcgcataata tatcgagacg ctcaaaaattg 240  
aacaatggaa gctcttgagc aattcaaatg gtcataactt gtcactcgga ggtccgattc 300  
agctgcataa tatatcgtga cgcctcgaat tgaacaatgy aagctcttga gcaattcaaa 360  
tggtcataac ttgtcactcg aaggtccgat tcaggcgcat aatatatcga gacactt 417

<210> 17920

<211> 452

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 17920

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agcgtctaga tatataatgc gcttcaatcg gacctccgag ttaaaagtta tgaccatttg 180  
aaatgctcaa gagcttccat tcttcaattt cgagcgtcac gatataattat gcaactgaat 240  
cggacctgag agtgacaact tatgaccatt tgaattgctc aagagcttcc attgttcaat 300  
tttgagcgtc acgatataat atgcacctga atcggacctg cgagtgcaca cttatgacca 360  
tttgaattgc tcaagagctc ccattgttca atttcgagcg tctcgatata taatgcgcct 420  
caatcngacc tccgagttaa aagttatgac ca 452

<210> 17921

<211> 458

<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 17921

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gctgagatg gctgagatg gctgagatg gctgagatg gctgagatg 120  
gctgagatg gctgagatg gctgagatg gctgagatg gctgagatg 180  
gctgagatg gctgagatg gctgagatg gctgagatg gctgagatg 240  
gctgagatg gctgagatg gctgagatg gctgagatg gctgagatg 300  
gctgagatg gctgagatg gctgagatg gctgagatg gctgagatg 360  
gctgagatg gctgagatg gctgagatg gctgagatg gctgagatg 420  
gctgagatg gctgagatg gctgagatg gctgagatg gctgagatg 480

<210> 17922  
<211> 396  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 17922

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gctgagatg gctgagatg gctgagatg gctgagatg gctgagatg 180  
gctgagatg gctgagatg gctgagatg gctgagatg gctgagatg 240  
gctgagatg gctgagatg gctgagatg gctgagatg gctgagatg 300  
gctgagatg gctgagatg gctgagatg gctgagatg gctgagatg 360  
gctgagatg gctgagatg gctgagatg gctgagatg gctgagatg 396

<210> 17923  
<211> 455  
<212> DNA  
<213> Glycine max

<400> 17923

atgagatg gctgagatg gctgagatg gctgagatg gctgagatg 60



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 tggcatgaaa cacattaagc cagtgcctcgt gtaaggagct ggaaatgtct tgcttatgtc 130  
 tttttcaaaa atgtaatgat ataataatcc tcttaaagag gaaaattaaa ctagttaaga 240  
 tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt  
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 tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt  
 atgacaaaag caaggctcca ctacacaca atatt 455

<210> 17924  
 <211> 364  
 <212> DNA  
 <213> Glycine max

<400> 17924  
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 aatatatcga gacgctagaa atggaatgtt gaacctatga gcttatcca acgacaataa 120  
 ctttttactc ggatgtctga ttgagtccca taatatatcg agacgctega aattgaatgt 180  
 tgaacctctg agccaattca aacgacaata actttttact cggatgtccg attgagtgac 240  
 ttaatatgtc gggacgctcg aaattgaatg ttgaacctct gagcaaatc acacgacaat 300  
 aactttttac cggatgtct gattgagttc cgacatatat cgagacgctc gaaattgaat 360  
 gttg 364

<110> 17925  
 <111> 411  
 <112> DNA  
 <213> Glycine max

<400> 17925  
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 tttatagtcgt atgaattggc tgaaaactta aacattcaac tttagagctc cegatatatt 120  
 acgggaactc atcagacatc cgagtaaaaa gttattggcg tgtgaagcgg cttagagcct 180  
 tagcatacaa ttatgagcgt ctcgatctag tacgggactc aatcagacat ccgagtaaaa 240  
 agttatgtcc gttgaatta gctcacaggt gcaacattca atttcagcgc tctcgatata 300

ttacggggact caatcagaca tccgagtaaa aagttattga ctgttgaatt ggctcagagg 360  
 tgcacacatc aatttggagc gtctcaatgt attacgggac tcaatcagac a 411

<210> 17927  
 <211> 393  
 <212> DNA  
 <213> Glycine max

ttcttatgtt gcaaatatctt acaatagacc tactcaacct cagcagcaaa atcaaacaca 60  
 gcagagcaat tatgaacctt ccagcaacag atacaacctt ggatggagga atcaacctaa 120  
 cccagatggt tccagccctc agcaacaaca acagcagcct gctccttctt tccaaaatgc 180  
 tcttggccca agcagaccat acattctctc accaatccaa caacagcaac aaccccagaa 240  
 acagccaaca gttgaggccc ctccacaacc ttctctcgaa gaacttgtga ggcaaatgac 300  
 tatgcagaac atgcagtctc agtaagagac cagagcctct attcagagct taaccaatca 360  
 gatgggacaa ttactactc aattgaatca acaacagtc cagaattctg a 411

<210> 17927  
 <211> 393  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 17927

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 aggtcgggaa agcaatgtaa aggacctcaa cccgtagcac ctctctcacc tgcaaatgaa 180  
 cctgcacaaac ttcactctat tccagaaaaa ggtgatgaca aaaatttacc taacaatttc 240  
 tgtgcagggt aatcttcttc cacaggtgat tctgatttgc agaagcagca cattcccccg 300  
 ctctcatttc ctccaagagc agtttccaac aaaaaaatgg aagaggcaga gaaagagatc 360  
 ttggaaacgt ttagaanagt agaggtaaac ata 393

<210> 17928  
 <211> 451  
 <212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 17928

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tctctctcttta tctctctcttta tctctctcttta tctctctcttta tctctctcttta 180  
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tctctctcttta tctctctcttta tctctctcttta tctctctcttta tctctctcttta 360  
tctctctcttta tctctctcttta tctctctcttta tctctctcttta tctctctcttta 420  
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<210> 17929

<211> 404

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 17929

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tctctcaatag tctctctctt tctctctgatt ttttaagtggc catcaaagge ttatatatat 120  
gtgactagag acacgaattt gataagagtt ttgaagaaca aaaaggtctt atctctcttaa 180  
caagcaaaaat tgtttttatcc tcttacaat tctttggcca aaacatttgt gattcaataa 240  
ggaattattt aagtgtctca atgtttcaat ctatctcttt caagagagat ttctctctct 300  
ctctctcttt atctctgaana gggattaaga gactgagggt ctctgtgtgt gaaaggattc 360  
taaacacaaa gganagaatg tctttgtgtg tttagaactt gtaa 404

<210> 17930

<211> 436

<212> DNA

<213> Glycine max

<400> 17930

tgatttagta taataagaag caggaatata aatctcttga tgcctactat tgatatatag 60

cattgaccat acatgaaact agctaaagag aatggaaaact attgataata gtacactcca 120  
 tagatagtca tgcctgtgtaa accactacta caagaaagca ctttaaatta tagtattagc 180  
 tagtaatttc tatgattgtg ttgatcatgg tgcgcctcac ataactgtca ggtgcctcca 240  
 ttttaattg tttttttt tttttttt tttttttt tttttttt tttttttt  
 tttttttt tttttttt tttttttt tttttttt tttttttt tttttttt  
 gttttttt tttttttt tttttttt tttttttt tttttttt tttttttt  
 aggttgaatt atcagt 456

<210> 17931  
 <211> 407  
 <212> DNA  
 <213> Glycine max

<400> 17931  
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 accaccgctc cagtgcctagt ttgcctaac ccgagagAAC cttttgaggt gtattgtgat 120  
 gcataaaga tgggttttagg tggagtgttg atgcaaaatg gccagtggg ggcatatget 180  
 tctagacaac ttatgactca tgagaggat tateccacc atgatctata gttggctgtt 240  
 gtatgttttg ccttaagat ttggagacat tatctgtttg gctctaagtt cgaagtgtct 300  
 agtgatcata agagccctaa atactgttt agtcagaaag agctaaacat gagacaaatg 360  
 agatggttag agtatcttaa ggattatgat tctgagctta gctacca 407

<210> 17932  
 <211> 378  
 <212> DNA  
 <213> Glycine max

<400> 17932  
 agttcttata ctttatacaa gcatgaagct ttcataccac ttgtagacaa gtggcctcac 60  
 atatcttaag aagggggggt gaattaagat attgcaaaact atttcccaaa ttaaaattct 120  
 atttacttt ctatgcaaga taaaaatttc cttataaatg aactcttaaa taatgattca 180  
 aatagaacaa tctaactata aataaaaaa aataatata aaaagagttt aacggaagag 240  
 aaaatgcaaa ctggattta tactugtttg gccacacct ttgtgcctacg ttcagttccc 300

aagcaacttg cttgagagtt ccactatctt gtaaaatcct tttacaagtt ctgaacacac 360  
aaggacaate cttccttt 378

<210> 17933

<211> 177

<212> 177

<213> Glycine max

<400> 17933

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tttgtaactca actgttgaca gatcaaagag gacaagtatt ttattcacia ccacttagca 120  
tttggtggtta agtatcatat tgatccagag tttagatttg caaggatttg aggatttgag 160  
gttacaccat tcagggttgta ttataattct tttccacctt gtttctaata tagtcttgta 240  
cttatctatt aatcttatgg ctaataataa ctgtacattg aaatgattct tatgaattca 360  
gggtaaagca tgaatatgaa agttaatgga atgagaattc ccgcttaact acctgtga 360

<210> 17934

<211> 361

<212> DNA

<213> Glycine max

<400> 17934

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cagaattctt cggcttttga catccaaagt atactttgac gtatggaggt ggccaccgag 120  
tgaactatcc acgagacaac catatttgta catcgacgcc acgctccatg cattctatct 180  
gttttgacag gttcagggcg gctgtcattt atgaactcta ctttgttctt ggctctcaat 240  
gcaatgatca tggacctgct ccatgagtgg tagttaactg aatgtaagac tgtggaaaca 300  
cggactgtgg ccggtttctc gtcggtatgg atgcagagat aactctccat gttgttgatg 360  
g 361

<210> 17935

<211> 358

<212> DNA

<213> Glycine max

<400> 17935

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 atgtcaacttt attgggtggtg aacttagttac gtggatatgc aataaactag actcaactac 120  
 attgtccact gtcgaagtcg gatatatgac aacaacaagt tgaatgaactc aacttctatg 180  
 attcaagatc cacttctcct atttctctct atttctctct atttctctct atttctctct 240  
 atttctctct atttctctct atttctctct atttctctct atttctctct atttctctct 300  
 atttctctct atttctctct atttctctct atttctctct atttctctct atttctctct 360

<210> 17936  
 <211> 379  
 <212> DNA  
 <213> Glycine max  
 <400> 17936

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 actatagcat cacttatggc gctaaactgc tgggagttag aagccatctt ctcaattaaa 120  
 tctctggctt cagcaagagt catgtctcca agggctccac cactggcagc atctatcata 180  
 cttctctcca tttactgag tcttctgtaa aaatattgga gaagaagctg ctctgaaatc 240  
 tgaatgtgag ggcactggc acatagtttt ttaaactcgt cccagtaact ctacaggctc 300  
 tctccactga gttgtctaat acccgagata tcttctctga tggctatggc cctagaagca 360  
 gggaaaattt tctctaaga 379

<210> 17937  
 <211> 426  
 <212> DNA  
 <213> Glycine max  
 <400> 17937

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 aatctacctt ccatagagca acaaaagtaat catcagcagg gatgtcaaat ttctggagtc 120  
 agatagttgg gactggaaaa atgataagag gtccgagttt caggaggaga atgaagatgt 180  
 tgaatgaaga cccataagag gaaccagatc actttcagac atcgcacaaa ggtgttaagt 240  
 ttctgtgatg gagcctcagg gatatgaaga agctacagct gatcagaat gataaatgc 300  
 aatgaagag gagcttcaaa tgaattgaaa aaataaaca tgggagctgg tggacagacc 360

taaccacaag aaagcgattg gtgtcaagtg ggtttataga accaagctca atccggatgg 420  
ttctgt 426

<210> 17933

<211> 407

<212> DNA

<213> Glycine max

agctccggtt gttcaatttt gagcgtctcg atatatatg cgcctgaac tgactttcga 40  
gttaaaagtt atgaccattt caatttcacg agggcttctg ttgttcaatt ttgagagtct 120  
ttatatatta tgcgcctgaa tctgacatcc gagttaaag ttatgaccat tgaattttct 180  
cgagagcttc cgttgttgaa ttctgagcgt ctgatatat tatgcgcctg aatcggacat 240  
ccgagttaaa agttatgacc atttgaattt cttataagct tccgttgttc aatttcgagc 300  
atctcgatat attatgcgcc tgaatctgac ttctgagtta aaagtatatg ccatttgaat 360  
ttctcgagag ctt 373

<210> 17939

<211> 407

<212> DNA

<213> Glycine max

<400> 17939

tataagaaat tcaaatggtc ataactttta actcggatgt tggattctgg cgcataatat 60  
atcgagacgc tggaaattga acaacggaag cattagagaa attcaaattg tcataacttt 120  
taactcggag gtctgattca ggcgcataat ctatcgagac gctcaaaatt taacaacgga 180  
agctcttgag caattcaaat ggtcataact tttaactcgg atgtccattt caggcacaca 240  
atatatcgag acggttgaaa ttgaacaacg gaagctctcg agaaattcaa atggtcataa 300  
cttttaacta ggatgtccga ttcaggcgca taatatatcg agacgtctga aattgaacaa 360  
cggaagggtta tgagaaattc aaatggtcat aacttttaac tcggatg 407

<210> 17940

<211> 381

<212> DNA

<213> Glycine max

<400> 17940

agcttgattt gaattaccat ttcaaatgag caccaattac gcttgcaccc agaagagcta 60  
caagtcaage tcaaaacaca gatagcaaac ctctccaact cttagagttcc atcaccacaa 120  
ctctccaccc atttctctggg ttctctctctt ttctctctctt ctctctctctt ctctctctctt  
ctctctctctt ctctctctctt ctctctctctt ctctctctctt ctctctctctt ctctctctctt  
aacatctctc acatctctctc tctctctctc gctctctctc tctctctctc gctctctctc  
atgctctctc ctgctctctc aatgctctc aggtactcta taatacgcag ttgtatgcaa 360  
aggtttgtga agctaatgat c 381

<210> 17941

<211> 416

<212> DNA

<213> Glycine max

<400> 17941

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gatcttcggg ttgatattct tcattccaact gacctttgac gagattggag tcaactccaa 120  
actctaggaa cttagctcat atttgcaatg ccacctaataa gggcttttggg cttaggcttag 180  
ttgtttgtcg ctctgaactt aaacctctat gattgctcta gaattacttc atttgggctt 240  
tctaggatga ctccagcccc actccctttt gtattggatg agccatctac acagagcttc 300  
caccacttga attacaattt tgtattgctt gatagcttga ttacaaattt tactatgcac 360  
tgagaattca ttgacccctt tgattcatat tttagcccaa acttggacaa tttgat 416

<210> 17942

<211> 375

<212> DNA

<213> Glycine max

<400> 17942

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ctctttcaga tggtyaccag atctctatagc ctctcactcc atcaccataa cccatgaaca 120  
gaccccttct tgatctaggg accagctctc ctctattgac atgataataa gcattgcagc 180  
caaatactct taggtttgag tagtttgcgt ttttgcaatt ccagatttca ataggagttt 240



taagtectat agcagtaaag gggtttctat tgatcagaaa acaagttgta ttgatagett 300  
 ctccccaaaa aattctgttg agaccaacat tatacaatag acatcttggt cttaccagga 360  
 gtgttctggt catto 375

<210> DNA  
 <211> Glycine max

<223> unsure at all n locations  
 <400> 17943

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 aggatatta gcaagtggt cctccacta tccaatctgt tgcaaaagga ggtggagttt 180  
 gttttgagc acgggtgcaa agaggtctct gattgctca agcgtgggtt gaataccacc 240  
 ctatccatto aggcacctga ttggacagcc ccatttgagc taatgtgaga tgcatacaat 300  
 tacgcattgg gggtatcct tgctctanag attgataagc taacctagga gatctactac 360  
 gcttccagaa ctttgg 376

<210> 17944  
 <211> 379  
 <212> DNA  
 <213> Glycine max

<400> 17944

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 cattctgatt ataagcacia cctacaattc cctccaaaat tttgtcacia gaaagcactt 180  
 gtaagtttat aaatcttgcc tgcccacgag gtttagattg cttctttgac caagtatgat 240  
 taggttgata tgcctgcatt gctctgtctc tatctctggt gccttccatg gattgctggt 300  
 ttatgtttgc ggacccagc aacacatatt catcctccac taccattcct ttggaatgaa 360  
 cataaatcat gaattctcg 379

<210> 17945  
 <211> 371

<212> DNA  
 <213> Glycine max  
 <400> 17945  
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 tgaagtggt tgaagggg tgaatgag ggacatga agtggaata tatgtaga 120  
 tgaatgag tgaagggg tggggaat tgggtggca aggttatg atcagaaa 180  
 ggtgctgtt tcaactaa ctgagggac aatgggtac ttagctctg agtatctca 240  
 ggtgggaatg gcaatgaga agatgatgt gtcagctat ggtgtgttg ttcttgaggt 300  
 ggtgtgtga a 360

<210> 17946  
 <211> 417  
 <212> DNA  
 <213> Glycine max.  
 <400> 17946  
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 tatcatatc aataatttc acatttatgt ctaattgtca tttacttca ttgtagtaa 120  
 tttctaagga atccatttc taagaaatc cgggcaataa atagacataa ccgtaacgtg 180  
 aataatcgc aataatggtg ataaagtatc attcctttt gaaagaacta acacaaaag 240  
 gtccacaaat atcagtatgc acaatttcaa gaagttgagt gcttcttgta gctctttct 300  
 ttgtatgttt tcttgtttt tccctaata caaccacac aaatatttag atccgtaaaa 360  
 tctagataag gaagaatttc attccttatt aatctttcca tctttctct aaaaatg 417

<210> 17947  
 <211> 424  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 17947  
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ttatttgatg cagatggagg agccttggat ttgaggacaa atccttttca agaaggaggg 180  
 agtgatgagg acataactaa gggcaaggac catgaagcac ttgaaggccc atgaccagag 240  
 gcatacttaa aaaggcccaa cacagtgatg aggacacaa taagggcaag gaccatgaag 300  
 taattttagg gggatgacg adagtgatg ttaagcaggc ggaacatg atgatttca 360  
 tttttagg gggatgacg adagtgatg ttaagcaggc ggaacatg atgatttca 420  
 tttttagg gggatgacg adagtgatg ttaagcaggc ggaacatg atgatttca 480

<210> 17948  
 <211> 378  
 <212> DNA  
 <213> Glycine max  
 <400> 17948

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 ttttaggggt tttgacaaat aagggttttag ggttacttga cgaatttggg tttaggggtg 180  
 tttgactaat gaggatttat atgtagttag gtaattagg gtttagtggt acttggccaa 240  
 tttaggttta ggggtatttg acaaattagg gttacttgac taataagggt ttatgggtat 300  
 ttgaaaatta aggtttaggg ttacttgaca atttgggggt taggtgtatg tgactaatta 360  
 agatttatag gtaattga 378

<210> 17949  
 <211> 367  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 17949

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 atatattacg ggaattcaat ggacatcaga gtaaaaagt attgtcgttt gaatttgcct 180  
 agagcttctg tttaaatatt cgagcgtctc gacatattat gggactcaat cagacatcgg 240  
 tgaataaagt ttagcgtcgt ttattttctt aatagcttct ttcttgcaat tagagcgtct 300  
 cgaatatata cgggactcaa ttggacatcc gagtaaaaag ttattgtcgt ttgattttct 360

ccagagc

367

<210> 17950

<211> 375

<212> DNA

<213> Glycine max

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ctgattcctt taagatctaa tatgtgccac ccaattgctt ccatgtgtcc cttgaggacc 180  
tttaccaccc tattctcttc ctctgtgtgt agtcactgt gatcaccaca ggcttgggtct 240  
ggtctctctc caagaacaca taattcaggt ggttgggtag gatcttcaac tccaccttgg 300  
cttctctcga tggactccca ctttttaatt cttcaaaget ggtccccctt gcaggaatgt 360  
tatcttcattg atcta 375

<210> 17951

<211> 376

<212> DNA

<213> Glycine max

<400> 17951

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taattctatc gtttccgatg cagacggagg agccttggat ttgaggacaa atccttttca 180  
agaatgaggg agtgatgagg acacaactaa cgacaaggac catgaagcac atgaagggcc 240  
catgaccata cgcaaacctt aacaggccga acagtcata aagacaaggg tgggcatttg 300  
tctcgtgtgc attgatgatg attgaaggcc caagtggaga cctatgaatg cccacatgca 360  
gaagcgtac taagac 376

<210> 17952

<211> 415

<212> DNA

<213> Glycine max

<400> 17952

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ctctctctaaa agattcgtgc ccccatcttt tgcacatggt caataatttc atccatccg 180  
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ggaatgtatc agtaatttct catcttttgc gtatgcctcc atcttccctc actacatctt 360  
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<210> 17953  
<211> 351  
<212> DNA  
<213> Glycine max

<400> 17953  
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tgttctctgtt gttggattgg tggaggaatg tatggtctgc ttgggccaac aacattttgg 180  
aaagaacgag caggtctctg tagctgttgt tctcaggggc tggaccatct gaggttatgg 240  
tctctactcc atccaaggtt gtatctgttg ctggagaggt cataattgct ctgctgcgga 300  
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<210> 17954  
<211> 369  
<212> DNA  
<213> Glycine max

<400> 17954  
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atgatccaga gtagaataat tcttagccag ccgcaaaact cgcattgcag actttggaca 180  
attcaacctc caagattcag gaaaatcaac acccataata gtcaagctct ggcattaaaa 240  
tgaaaaccac actaagacac acccaacacg tttttcgaag tacttatcag ttccattcca 300  
ttctgaaagg agagaagata caataactga aaatcacctc caggactaac acttatgaaa 360

ctatgcata

369

<210> 17955

<211> 413

<212> DNA

<213> Glycine max

<400> 17955

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ctcggatgtc cgattgagtc ctgtaatat acgagacgtc cgaaattgaa tgttgaactt 180  
ctgagcaatt tcaaacgaca ataacttttt tctcggatgt ttgattgaga ctctaatat 240  
atcgagacgc tgaagttga atgtttatgc tttgagccaa tcaaacacc aataactcta 300  
tctcggatgt ttgattgac tcccgcgatt taacgagacg ctcaaaattg aatgttcaag 360  
ctctgagtta attcaaacga caataacgtt ctactcggat gtctgattga gtc 413

<210> 17956

<211> 412

<212> DNA

<213> Glycine max

<400> 17956

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gttcaagcac gactctcttt ctgcttttgt ttgcttgctt tgcatagctc gcattttctt 120  
tttcaatttg aaccttcaat tctctatgca acttcttcaac atactcagct tttagctgag 180  
cactcttatg cttaaacata gcaatgttac gcatatgcaa catatcaaga ggagtc aaag 240  
gattaaatcc atacactatc tcaaaagggtg aacaattagc tgtgctatgg acagcccgat 300  
tataagcaaa ctcaacatga tgcaaacagg cttcccaaga tttatagatt tttctttata 360  
acagtcctaa gcagtgtgcc ttaagtccta ttgactacct ctacttgacc at 412

<210> 17957

<211> 379

<212> DNA

<213> Glycine max

<400> 17957



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 ccttcaccag cagtactttg ttcagactat gaagtcacac atgaactaga tttccc 416

<210> 17961  
 <211> 404  
 <212> DNA  
 <213> Glycine max  
 <400> 17961

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 ctctcactgt ctgatatgc cgagactcgg aaaccacaa cagttttatc tttcccatgt 100  
 actcgaaaca aaactcagta gcttgcttgg caatgtactt ttcacaata aatgcttgag 160  
 gaaggtgtag attctttgta taccctttta agatcttcat gtatcgctca accgggtaca 220  
 tccacccgaa ataaatggga ccacaacatt caatttccct caccaaatga acaattaagt 300  
 gaacgtgat gtcgaaaaat gaaggaggaa aatacatctc caactgacac aagataatag 360  
 tagtctca 368

<210> 17961  
 <211> 404  
 <212> DNA  
 <213> Glycine max  
 <400> 17961

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 attgatgtgg tgacaatgga agtccttgat gccactgctc gaagtttgag tcaagttcag 180  
 catttataat ttcattgatg tcttaaaaagg taacctgtgg atgtgcagct ggagttgctg 240  
 cagcatttag agagctccag tttgtggtgt attggttget ttggaagagg ttacatctta 300  
 attggtatgg atttttatct ctgatcaaa gattctgttt gcttagaagc atgtgcagta 360  
 aagatagtggt tgtctgtact taaattttgt tgcctgtgct ctg 404

<210> 17962  
 <211> 404  
 <212> DNA  
 <213> Glycine max



<400> 17962

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ggtcttgaat ttctcagggt ccacttggac cccatttcta ccaactacta aacctaaaga 180  
ggtcttgaat ttctcagggt ccacttggac cccatttcta ccaactacta aacctaaaga 240  
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ggtcttgaat ttctcagggt ccacttggac cccatttcta ccaactacta aacctaaaga 360  
ggtcttgaat ttctcagggt ccacttggac cccatttcta ccaactacta aacctaaaga 420

<210> 17963

<211> 413

<212> DNA

<213> Glycine max

<400> 17963

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tgtacctgtc gcaagggttt gtggtttgtg ctctctgtct gaaccaccata cagacctttg 120  
cccttccatg cagcaacctg gagcaattga gcagcctgaa gcttatgtct caaatattta 180  
caatagacct cctcaacctc aacagcaaaa tcaaccacag cagagcaatt atgacctctc 240  
cagcaacaga tacaacctg gatggaggaa tcaccctaac ctacagatgg ccagccctca 300  
gcaacaacaa cagcagcctg ctcttccat ccaaaatgtc gctggcccaa gcagaccata 360  
cattctcca ccaatccaac aacagcaaca accccagaaa cagccaacag ttg 413

<210> 17964

<211> 379

<212> DNA

<213> Glycine max

<400> 17964

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gcaatcttga aacctccatg gaaattctga ctctcaatct ttaattcttt ctcttagcat 180  
taggagcgag gcttttagta tgagccttga aataggcaac aaatttggtc ttaagtaggc 240

ataacttctt tgacacctgc atggttgoga aagtcttggc tccatctgaa gagcttagga 300  
aattttctac atgtgaacaa ttgcagccca tttatatctt gaattatagg tatgaataca 360  
aaaacaatat ccacataac 379

<210> 14-  
<211> DNA  
<212> Glycine max

<223> unsure at all n locations  
<400> 17965

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aaagaaacca ctctatctct cgtcgccaca ttggtttctt ctctgaacgc aggggctcta 120  
atctccaaag ttggccaaag agggtagctg caaattcagc aaagaaatga acaacaacaa 180  
tcaagtcbaa gaatagcaaa tgaataaaat tcaccacacc aattaataaa aaataaaaaac 240  
acagtaactg ctccaagtgt gcattttgca taccacatag attgggttatg gcatttgaga 300  
tagccaaggc tgtagcgacc ccatttccac aacctgacat atcttctcca agtaacaatt 360  
ttgcaaacct ctcttctc acctcaatct ctacaagtga gaatgaaaat caaatctc 418

<210> 17966  
<211> 371  
<212> DNA  
<213> Glycine max

<400> 17966

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agagggcatgc aaaatgggta gagtacctag agcaatttcc atatgttata aaatacaaaa 180  
agggaaaaac aaatgtggta gctgatgccc tctctaggag acagacattg ttttgcctcc 240  
taggagctca aatttttagga ttgataata ttagggaactt gtatgcttta gatgaacatt 300  
tctctcccat ttatgagagt tgtgggaaaa agggccaaga tggattctat ttggctgagg 360  
ggtatttggt c 371

<210> 17967

<211> 424  
 <212> DNA  
 <213> Glycine max

<400> 17967

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 atcatggaca atttcttcat ttggttttga cgaaaacccc atggatcaat gcataataca 120  
 caaagtcagt gggagtaaaa tatgtttgtc tgttttatat gtatatgata ttttaacttg 180  
 agccaatgat tgaagtttgc tagatgaggt gaaacaattt ctctctaaga attttgacat 240  
 gaaggatcag ggtgatgtat cttatgtcat cgacattaag attcatagag atagaccttg 300  
 aggtatttta ggtctatcac aagaaacctt tattaacata atttcaaaga gaatccagat 360  
 gagagattgt tcaccaagc 379

<210> 17968  
 <211> 379  
 <212> DNA  
 <213> Glycine max

<400> 17968

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 caaagtcagt gggagtaaaa tatgtttgtc tgttttatat gtatatgata ttttaacttg 180  
 agccaatgat tgaagtttgc tagatgaggt gaaacaattt ctctctaaga attttgacat 240  
 gaaggatcag ggtgatgtat cttatgtcat cgacattaag attcatagag atagaccttg 300  
 aggtatttta ggtctatcac aagaaacctt tattaacata atttcaaaga gaatccagat 360  
 gagagattgt tcaccaagc 379

<210> 17969  
 <211> 381  
 <212> DNA  
 <213> Glycine max

<400> 17969

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 atacagacct ttgtctctct gtgcaataat ctgaagcaat tgaacaacct gaagcttatg 180  
 ctgcaaacat ctacaataga cctcctcaac ctgagtagca aaatcagcca caacagaaca 240  
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 ctgcaaacat ctgagctctc c

<310> 17970  
 <311> 381  
 <312> DNA  
 <313> Glycine max

<323> unsure at all n locations  
 <400> 17970

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 atgcaagcaa ggagtggctc tgatgggtgt tttctgaaaa ggtactacgg cggtcattta 180  
 cttgcagcag tgggacaata tgaaaacaat gcattttttg tgattgcata tgcaatagta 240  
 aatggtgaag ataaagacaa ttggaagtgg ttcttcacat tgttacatga agacattgga 300  
 gactacgaac aatatggctg gaatttcctg tcagacatcc aaaaggtgca attcaattgt 360  
 ctgctcttga gtaattntga c 381

<310> 17971  
 <311> 419  
 <312> DNA  
 <313> Glycine max

<400> 17971

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 ctaggcaatt agacgtatca aggggaacat aaactcaatg aggggaacatg cagagctttt 180  
 gagtctctgc agggatgata ttactgactt taagggtgaat catgagtttg atttgaatta 240  
 aattacaaag ctatttctc atagctgtac tagacttacc tttttttggc agacatcagg 300  
 cagtatgtca ccaaggatgc agttaactac tgagagagct gccatccatg gaagtatata 360

tcacgtaagt atttataata tgaaatatga tgaatttgta ttctcttact tgaaattct 419

<210> 17972

<211> 417

<212> DNA

<213> Glycine max

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aggtctcgag atggatgagt attgagtcac ttaaggcat tatctcttat gacggaaaaa 180

tggaaaaaca tcatatagag attctctctt tcagtttggg tcaacctgt tgtaccacat 240

tgatcataaa atgtggccag atggttgtat gggctctcat tagctaaact aggaaatgca 300

tgttgggcaa ggaaagtgat taggcctaac tttagcctt gttgtgtggt tgttgcctt 360

tgtctatgca atgttgaagt ataactgtga accattatca ggttcattgt cggcaag 417

<210> 17973

<211> 375

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 17973

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ttgagcaata ttattttttc ttgatcaaaa gtcaaaaacta ttcattttct gacgattcca 180

ttgagggtgt aatgagtaga aaggcaatag gcagaagatg ccattcaatc aatatagtta 240

ggatatctat tggtttacat ggtgcaagta gacatatata atatggattg aaatttttag 300

agcattgaaa tcaaatcaat ttacttataa tatataaaaa catatttcaa ttttaatgca 360

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<210> 17974

<211> 365

<212> DNA

<213> Glycine max

<223> unsure at all n locations  
<400> 17974

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tcccaacttt tcccaacttt tcccaacttt tcccaacttt tcccaacttt tcccaacttt 180  
tcccaacttt tcccaacttt tcccaacttt tcccaacttt tcccaacttt tcccaacttt 240  
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<210> 17975  
<211> 425  
<212> DNA  
<213> Glycine max  
<400> 17975

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catagagaga tggagatata ttaatgatga aagttttcca aatgatctag gaagagcacc 180  
accaattgag ttgttggaaa aaagtaacgt gtcaatattt ttaaagccc caatatgate 240  
tgtcagattg cctgaaagtc gtgaactctg aactgcaagt gttgtgagtc catgggaaat 300  
acaacgagca agaatttcta aaagttcatt aacctgttgg ttgagtttga gatatgataa 360  
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attac 425

<210> 17976  
<211> 418  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 17976

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 agotaattct aactctagtt acatgataac ttatgctaatt agcccccttc aagctaggaa 240  
 tgaatgttag abgtgcctag cttggaatac aaaaattgaa aaacacacagg cagcagagct 300  
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<210> 17977  
 <211> 362  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 17977

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 tgtctctctg taccttaaac cagctttcaa agatccatgt agatacctta gtgtccactt 300  
 cacagcttcc tagtgtgcgc tgcacaggac tcccatgaat ctgcttataa tacttatagc 360  
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<210> 17978  
 <211> 364  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 17978

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 aacctctga ccagcaagtc cttcagttga agaattattca ggtcgagcta tgggaaaagg 180  
 ctaagttgca ggaatccttt gttaggcaga aatctaaatg gattaaggag ggagatagca 240  
 atagctccta ttccataaaa attatcaatt tcagtaggag aagaaacacc ttgagggggc 300  
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attt

364

<I10> 17979  
<I11> 398  
<I12> DNA  
<I13> Glycine max

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tttagagctt caacattcaa tttcgagcgt ctcgatatat gatgggaetc aatcagacat 240  
ccgtgtaaaa agttattggc cgttgaattg gtcagagctt tcaacattca atttcgagcg 300  
tttcgatata tgacaggact caatcagaca tccgagtaaa acgttattgt cgtttgaatt 360  
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<I10> 17980  
<I11> 402  
<I12> DNA  
<I13> Glycine max

<I23> unsure at all n locations  
<I33> 17980

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ttactcagat gtctcattga gtctgaaat ttaatgagac gctcgaaatt gaatgttgaa 360  
cctctgatct aattcatagc acaatatact ttacacgga tg 402

<I10> 17981  
<I11> 423  
<I12> DNA  
<I13> Glycine max

<I33> 17981



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<210> 17932  
 <211> 395  
 <212> DNA  
 <213> Glycine max

<400> 17932  
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 tgcacacaca tggcctctat ttatagccta agtgcacaa acaattggag ggaaatatga 180  
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<210> 17983  
 <211> 376  
 <212> DNA  
 <213> Glycine max

<400> 17983  
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 acaactccac actgcttctt tgatcttatg atccgagaaa ggagcaatca attctctctt 180  
 ctgccttttg ttaattgaaq aqaattgtac tccatcaagg gtgggtctga aaagctgttg 240

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 <211> 311  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 17934

agcttggttat ccgagtagac tactccgaga atggttggcat tgactacccc agttgaaatg 60  
 ttgaactgtt tactaatgc attcacatc agcgggaagcc ttgcagggtc tttaccagcc 120  
 actgtctgca caggggttgc taagyaatcy aagtttgagc tcgacacaaa ctctggcaat 180  
 atgttggaat gcactaatc gattttctgg ccttcgttta aggagttgag gaagcctgct 240  
 ttgaagttgg aaaaggcaga atcctctggg gcaaggatgg ttatgcgcgc actcttggct 300  
 gttatgagct gtgagttgat gttgttcctg atttctgtgg ttntgaggag ggggattang 360  
 actgagaaca ttnnttgctt ttccaggatt ct 392

<210> 17935  
 <211> 311  
 <212> DNA  
 <213> Glycine max

<400> 17935

agcttgataa caagtgaaaa tgccttgata atttggcca tactgctgat gaaaaccctt 60  
 agccaccaac ttggctttgt acttgtaac aatgcacatc gagttttctt ccacctaaaa 120  
 caccaccttg caaccaatgg aagtcttgtt aggaggtata ggaactagac tccatgtttt 180  
 gttttaaatt aaggcatcat attcagttg catagcagcc aaccaagtag ggtcagccaa 240  
 agcttgcttg gtggatttag gtctaaaatg ggtcagaata agggtaacgt gaatcttctg 300  
 ttgaacaata c 311

<210> 17986  
 <211> 393  
 <212> DNA



tgggaagcca tataagttag accttatgta cccaccatgg tggctggaaa tacaacaata 240  
 gagaaacctt tacaagagtg gtatgaacat gacagaagat tagtgcagta caattttatag 300  
 gctaaaaaca tcattacttc tgcctataga atggatgcat atcttacctt tccaaattgt 360  
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<411> 419  
 <412> DNA  
 <413> Glycine max

<400> 17989

taaagaaaaa gatggcctca gcaaattctt tattttcttg aagggttaatt ctatcaatag 60  
 acctcaatc tttaatggag agggttacca ctactggaaa acccgaaatgc aaatttttat 120  
 ctatggcaata gatctaaata tctgggaagc catagaaata gggccttata taccbaacac 180  
 agtagaaaga gtttcaatag atggtagttc atcatgtgaa agcataacca tagaaaaacc 240  
 tagagataga tggctctgaag agggtagaaa acgagtacaa tacaacttaa aagcnaaaaa 300  
 cataataaca tctgccctag gaatggatga atatttcaag gtttcaaat gtaagagtgc 360  
 tcatgaaatg tgggacactc ttcgataaca catgaaggaa ctacagatgt taaaagatc 419

<210> 17990  
 <211> 339  
 <212> DNA  
 <213> Glycine max

<400> 17990

agcttgtgdc tcttcacgtc tggaaataga atagcatata gatcnaaaga cccttaggtg 60  
 ctttgetgat ggcttcttcc cyttccaagc ttcaatagga gtcttgtctt ttacagactt 120  
 agttggacat ctgttgagta tgttaacagc aatgtagact acttcagccc aaaatgtgtt 180  
 aggtagtccc ttctcttga gcacagatct agccatttcc ataactgtgc gaattttctt 240  
 ctacagacact ccattttgtt gatgagaata tgcgaatgta agttttctgt caatgccttc 300  
 atcttcacaa aaactttcaa acttgcgaga ggtgtactc 339

<210> 17991  
 <211> 394



tccccaaatc cctgaataat gtaaagatcc aagtaacatta agcatatcctt gtattatagg 120  
 aaacagtaag ttgacaatg ccattgctaga ttaatgagct tctgttagtg ttatgctca 140  
 gttatttttt aattctctat ctcttggtcc ttgcagtc aatgatgttg taatgcattt 240  
 agtaalaga aattatctt atctctcttg ttcatagaa aaagtctaa ttgaatttg 300  
 tttctaat tttctcttg tttctcttg tttctcttg tttctcttg tttctcttg 360  
 ataatctcc ataatctag gaaacgctt tatgaaaat cctgaaata aatagatct 400  
 411

<113> 17994  
 <115> 409  
 <112> DNA  
 <113> Glycine max

taatatatcg agacgatcaa aattgaaat cgtattctct cgtgaaatta aaatggctat 60  
 aagttttaac tggatgtcc gattcaggag cttcacatat cgagatgcac gaaattgaac 120  
 aatggaagct ctgagaaaat tctaattggt ataaattttc acaaggaggt cctattcagg 180  
 cgttaatat atccagaagc tcgaaattga acaatggaag ctctcgagat attcaaatgg 240  
 tcaaaacttt tcaactcggat gtccgattca ggtgtatcac atatccagac gcttggaatt 300  
 gattagcggg agctctagag aaattcaaat ggctataact gttcaacagg aggtctctatt 360  
 caagcgttta atatatcgag acgctcgaaa ttgaacaacg gaagctctc 409

<110> 17995  
 <111> 420  
 <112> DNA  
 <113> Glycine max

ccttaattggc ttaatgagga tggagaggag caagtaatgt agccttttgt gttggatatt 60  
 accattggag ggtacaatga ttaagtccta tgtgatgttg atgctatgga ggccagccac 120  
 ttaactcttg ggagaccatg ccttttgat aagagggcta gtcattatgg ttccaccaga 180  
 aagatctctt tgggtctca tggcttaaag atcgtgctca aactattgag tccccaaaaa 240  
 ctgtgcgagg atcaagaaa atgagagag aaaattcttc tggagaaaac caataatga 300

aaadagagtc aaacacttga gagttcatat agtgaggaca caaagaguga aacacatgag 360  
agaatctga tgagtgaac acctgaagtg agggagaatt tctagttaca aaaggagagc 420

<210> 17996

<211> 404

<212> DNA

<213> Glycine max

<400> 17996

ctcacaacaaat ataatagag tgagtgtgat gtttagtttaa atacttata ttgggttgta  
tgttgacaaa ataaacactt cacaaaaatat atatatgtat gtttaggttag aaagatacct 120  
taaatatgaa tgtatgtaaa caaaaaaata cttcacaaaa catatatatg tatgtttagg 180  
tgycaagata ccttggatat gcatgtatat agcaaaaaata cttcacaaaa atatgcacat 240  
gtatatgtag cataatacct catgaaaaaa taagaataaa acaacaggcg cyataaagat 300  
ataaacagat gataatgatt ataaaaaaga aggagaaaaa agaaaaata agttgtcaag 360  
ctgaaaaacc aacatgcgtt tgaaaagaga tgaacttcaa cttt 404

<210> 17997

<211> 357

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 17997

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gtgatgctag tggagttggc attggggctg ttttgataca aaacaaaagg cctatagctt 120  
atttctcgga gaaattggga ggagccagat tgaactattg cacctatgac aaagagttct 180  
atgcacattgt gagactcttt gatcattgga atcattatct gcgtttctaat cactttatat 240  
tgcattcaga tnatgagtca ttgaagtata tcaatgggca gcagaagttg agtccaaaggc 300  
atgctaaaag ggttgaattt ctccaatctt ttaatttctc ttccaaatac aaggatg 357

<210> 17998

<211> 423

<212> DNA

<213> Glycine max

<400> 17998





ttccagcaat agataccacc ctgcatggag gaatcacctt aacctacat g

291

<210> 18001  
<211> 379  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18001

attttttat tttttttt gataaataa gtaactgata cttttttat aatcatttt  
ttcatgctcg cactaaacac atggagttag acctattttt tgttcgtgaa aacattttta 120  
acaagttgct cttagtgttt tatgtgcttg ccaccggtca atatgttgaa attattacca 180  
aatctttatc ttttaccac ttggaagctt tcaggtttta gtcacactg tgtgatccct 240  
caaattcttg tcagtctcac ccactgatgg ctcacctg cagttacttt ttgtgcattt 300  
atgttttaag ggaaatttca atgggggggt ntatcacctg anagcgacac aagttgtcaa 360  
gtattttaaaa ttaaaacgg 379

<210> 18002  
<211> 336  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18002

agctntgcta ttccatgctc aattgtgaat cttttttag gtaaaacact actggatttg 60  
ggagcaagca ttaattttat gccaaatttca atgcttacta aagttggaga tgtggagatt 120  
aagccaacaa ggatgacact ttaactgaca gatcaatcaa agttccatat ggagtaatgg 180  
aagatgtgct agtgaaggtg gataaattca tttcttgggt tgactntgta atcatggata 240  
tggaagaaca tgttgaagtt ctttttatc ttggaagact attcatgatg acaactctad 300  
tattgatgta ttttaacaat ggcaagctca aaatac 336

<210> 18003  
<211> 422  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations

<400> 18003

tggatttctt ttagtaggga atctatcctt cctaagatgg agccaaatcc agtcaccgtc 60  
atgaagaact agcttttttc atcctctatt gccttttagtt gaatacacet ttgttttggt 120  
ctctatttcc tctcttctcc tctcttctcc atctcttctc agctcttctc tctcttctca 180  
ctctcttctc tctcttctcc tctcttctcc atctcttctc agctcttctc tctcttctca 240  
atgggcaaa' tctcttctcc tctcttctcc atctcttctc agctcttctc tctcttctca 300  
agcctctana agggctggata aagatctatt cactacctct gtttgcctat cagtttctgg 420  
at 422

<210> 18004

<211> 393

<212> DNA

<213> Glycine max

<23> unsure at all n locations

<400> 18004

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tgaagaagaa tgtgtcattc acttgggggtg aaagacaaga gcaactcana gaaaagctca 120  
ctgaggccccc tgttctagct cttcttgaact tttctaaaac ttgagctaga atctgatgct 180  
tctcgagtgg gtgtaggagg tgtattgttg caaggtgagg accctattgc ttatttttagt 240  
gaaaaaatte atggtgccat cctcaactat cccacctatg ataaagagct ntatgcctta 300  
ataagaagcc ctcaaacntt gggaacatac cttgtttcca aggaatttgc attcatagtg 360  
gatatgaatc acctaagtac attagaaggg taa 393

<210> 18005

<211> 386

<212> DNA

<213> Glycine max

<400> 18005

agctttcatt gtttaatttc gagcgtctcg atatctta'g cgcctgaatc tgaactccgt 60  
g'gaaaaatt atgacctttt gaattctctg agagct'cgg ttgttcaatt ttgaagctct 120  
tgatatatta taagcctgaa tgggacctcc gagtgaataa tta'gacctt ttaatttct 180

cgagagcttg cgctgttcaa tttcgagcgt ctctatatgt gatgtgcta aatctgacct 240

ccgtgagaga agttatgacc attttaattt ctcgagagct tccgttggtc actatcgagc 300

gttcaatat attatgcgcc tgaatctgac ctccgtgtga aaagtatatg ccataatatt 360

.....

.....  
DNA  
Glycine max

<22> unsure at all n locations  
<40> 18006

nttaactcgg atgtccgatt caggcgcata agatatctag atgttcgaaa ttgaacaatg 60

gaatcgtttg agcaattcaa atggtcaaaag cttttcactc ggatgtccga ttcaggcgca 120

taatatatcg agacgttcga aattgaacaa tggaaagctct tgagcaattc aaatgacatc 180

aaattttcac taggatgtcc gattcaggcg cataagatat cgagatgttc gaaattgaac 240

aaagggaatct tttgagcaat tcaaattggtc aaagcttttc actcggatgt ccgattcagg 300

cgtataatat atcgagacgc tcgaaattga acaatggaag ctcttgagca attcaaattg 360

tcataacttt taactcggat gtccgattca ggcgcataat atatcgagac attcgaaatt 420

gaa

<210> 18007  
<.11> 413  
<.12> DNA  
<.13> Glycine max

<400> 18007

taactaatca gatgggacaa ttggtactc ttttatatca acaacagtcc cagaattcta 60

acagattacc ttctcaatct gtctagaatc tcaaaaatgt gagtgccatt acattgaggt 120

cgggaaaagca ggttcaagga cctcaacag tagcatcttc ctcatccgca aatgaacctg 180

tccaacctca ctctactcca gaaaaagatg atgacaaaaa ttaaaagagt aagttacera 240

acaaattcta tgcaggtgaa tcttccacta gtaatttga ttacagaag caacatatcc 300

ctttccatt ccttccaga gaaatttcca acadaaaaaa tgaagagc adagaacag 360

atattggaaa catttagaaa agtagaggta aacataacctc tgctggatgc aat

413

<210> 18008  
<211> 144  
<212> DNA  
<213> Glycine max

ggtatcaca agatattag gataaattg cctttttgg ttggtctct gttttttat  
ggtatcaca tgatgttagc ctca

144

<210> 18009  
<211> 339  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<410> 18009

cattcaacct tccaagaaaa agtaatggcc gttggaattt cctctgacct tcaacattca 60  
attccgagcg tctggatata ttacgggact caatcagaca tccgagtaaa aagttattgt 120  
cctttgaatt ggatcagagg ttcaacattc aatttcgagc gtctcgatat atttcnggac 180  
tcaatcagac atccgagtaa aaagttattg tctgttcaat tggctcagag gttcaacatt 240  
caatnttgag cgtcccgata tattacgtca ctgaatcgga catccgagta anaagtattg 300  
gggtttgaat tgctcaaagc ttaacatttc aattcgagc 339

<210> 18010  
<211> 308  
<212> DNA  
<213> Glycine max

<400> 18010

aaaagatagt tggaggtctg ctgcataact attcaagtao ctaaaattatg caagggaatc 60  
gttctttgtt taaaacttaa attattaaaa ataattataa atgctctctt acatgaacct 120  
tctttataat cgtttatdat gggctaacct atagcatagc gggctctctt ttaccttgg 180  
gtatttgaa atattataaa ttacagggaa gttacaaaaa tggttcagaa tgttctctat 240

taccccttac ccagttttcc caatgggtcca tctacatatt atactatatg tcaaaaccaga 300  
aattgaat 308

<210> 18011  
<211> 316  
<212> DNA  
<213> Glycine max

agcttcatgt gaagatttgt gaaagtgtaa cctgttcaat gacatttgaa atattatag 4  
tgtctctagt agagaaaaaa gtcaaaaagtc acttctttat tatttgccta ctttcccaac 120  
caaagtgtca ggccaggttc tccatccccc acactcttat atgagaacct gactttacgt 180  
tttcacatat aatgggtatgt agttctttgca tgaatcanat aatccatcta attcaccagt 240  
ctcataatct agtttatgac atatcaccag agactaagga ctgggtgtctg taaactgtga 300  
nagggccaag ttgatg 316

<210> 18012  
<211> 195  
<212> DNA  
<213> Glycine max

<400> 18012  
catggatctt acttgcctggc tctgaggggg tggatccact gagctagaac attggctccc 60  
tggtctcacc cctttttctg ggagtgaatg agtctgtctc gctggcattc caggagccac 120  
tatgggtatga aaaacaaaaa ctctgtagc tagttcgggtg tctgacaaaa tggtgcccc 180  
agtttttgctt gaaac 195

<210> 18013  
<211> 376  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18013

agcttccatg caaatctatc caatataaaa acatgcacac atggaacct agagctaaaa 60  
gtttccatg aaggaaaacta aaaaacacgt atgaaagaa ttctagatga caaaaacaaa 120

tggaaaaaca cctcatgcac atggattgga aggaacattc attaaaatga acataacttgc 180  
 ccaagaaatc tacagattca atgcaattcc tatcanaata tcaatgtcat ttttcatang 240  
 aatagaanaa gcaatcttaa nattcatata gaapcaaaaa agagaccana tagcccaagc 300  
 autctaaac aaaaaaaa taaatctatc catcagatta actaactata aattatctta 360

<210> 18014  
 <211> DNA  
 <212> Glycine max  
 <223> unsure at all n locations  
 <400> 18014

agcttngttat tgcaggcact gngccgggtt gttttttaac ctgttttacc tetacattta 60  
 caattatcagc ataataact ataaataaat atatgctgat taatatattt tcaatggtag 120  
 aatttaaact aaatattatt tttaaaacca cactctctct agcttngtta ctaagagcaa 180  
 agaaagtcac atacagtaag gtttagtctt attgtaaaag aaaaatttca gacaacataa 240  
 atttaacaga atttaactgg aaaaaaaga aagattcatg aatcacacat tacacagaat 300  
 ctgaaaagat tcagagagct ctgctttgcc acatgggcag tgagtattta tagacagaac 360  
 atgggagtaa gtatagaaat 380

<210> 18015  
 <211> 255  
 <212> DNA  
 <213> Glycine max

<400> 18015  
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 catatttatg gatgagtggg ttaactagtag acaaagacaa attatcttta aatctgaagc 120  
 tataaaaagt ttaatgttgt tgatttatac tgcccagctg ttctccagc auggtggta 180  
 gcagggtgac ataaaaataa aacagcatcc accctttcta tgccaaaagt aagaaaagaa 240  
 ttaaaatgat gtccc 255

<210> 18016  
 <211> 255

<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18016

gaaaaaagaa tagaaatgaa adacaaacaa gaaaaatcgc aaatatttaa gtaaaataa 60

aatatcatca aatttlattd aatttbaaa aiaatctaaa aatcttga' tgaataaa' 140

aagatttttt tatcttattt aaaagtntg attgaatctt aca 283

<210> 18017  
<211> 358  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18017

ccccaagaag aaaggaattc acccagtgca tacaagtatc tgcaggcaca nataaatcct 60  
tggttgagct caagagactt ttaaaaggtc taatctgaga ttccttatga aaaaaattcc 120  
agcatagcca gttagagaaa gagagcctat atggccaata attattcttg ctgcacttta 180  
tgtaaataat taggcatagt ataataaagc aagcttattt tgcaaataaa ttggtcttgt 240  
ctttagtaaa aataaactgg agagagacaa attatgggtc ataacagcta cagcacacct 300  
gttattagat tccaacctca tccattgttc ttgagcttct gctgatgacc ccatattt 358

<210> 18118  
<211> 452  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18118

agcttactat catgggtggaa ggtgaagggg gagaggacaa gtcacatagt gaaagcaaga 60  
gaaagagada naatgtgttc ggcagaggtg ccacacactn taaagtaacc aatctctatg 120  
gaaatcact atpaganaga caacaccaag ccattggatca tcaacccat gatcaaaaca 180  
cttccacta ggcaccacct tcaatgtctg gaattacaa' tcaaaccaag atttdugtg 240

tgacaaatat ccaaactgta tcagcagact aatacaatag tacattatga tcaaataagg 300  
 tttatctcaa gatgtaaatn tgggttaacc atttgaaact aatcgtgtaa ttcacaaaaa 360  
 ttacacdata naaaagaaaa atratatgag tatctcacia gatgcagaaa caggatttga 420  
 caaaattcaa taccatctca tcatataaaa ct 480

<210> 18019  
 <211> 400  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18019

agtttnattt anactccaca ccccgcaacc tcttctgctc tgccttctgt gggaggaacc 60  
 ttacaaatnc caaatcatgt cagccaacgt atttaaagta ctgaaaacat attttangaa 120  
 taaaatctga agaaaaatgc gtttctatg cctgngtcac atcagtttgg gaaaaaa-ct 180  
 gatgcaagaa gataaaatgc cagctccagt agcagaaacc aactaccaca tcaaagtttg 240  
 tcctctgcct tttggttgaa agcatggcan gcaagcggat ctatagtga gcccgctgat 300  
 catttta 307

<210> 18020  
 <211> 412  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18020

agctttttgt ctttttttat ccagangcta atatgaatga ttcccaaact tgtgcacatt 60  
 gaaatcacca acaggtcttt caaaaaatac tgatgtgggt tgaagacatt gtgatttaat 120  
 tgttattggg tatgacttga gcattagtat tttaaaaatc ttgtagatga tttattttta 180  
 gccataaatg tatcccatag tttgtttatc ccataatttc tgattcttcc cacatcaaga 240  
 atcaggtgac atcaactgaag atgttacaag tattaagttg ataattagac aatataaaaa 300  
 agcatttttt caatatattt aacattgtaa tgaaatggag atttttgaaa tataaanatt 360  
 actaaacatt atcactgaag aaataaataa cctgaataga cctatatcta at 412

<210> 18021



<211> 235  
 <212> DNA  
 <213> Glycine max

<400> 18021

ctggaattca ccttaattccg gtttttcatt cattaacatc tccctgaaga agtattctc 60

ggttttttgc ctttttttgc ctttttttgc ctttttttgc ctttttttgc ctttttttgc

attttccacc tcaagtttcc ggacatcaga atgggtttt tctaccgtg catta 120

<210> 18022  
 <211> 376  
 <212> DNA  
 <213> Glycine max

<213> unsure at all n locations  
 <400> 18012

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 atcaatggca cattgtctnt gtttaactntg ttgttggtat ttctttttaa tagtaagttt 120  
 gctggttgaa cactcgggtct aacttcagtt cattcaaaaa cagttcattt tgaaaggaac 180  
 aataaggaac aaacgaaata cacacatgat atggattggc tgtatcccca ccaaattctca 240  
 acttgaatto tatctaccag aattcccaca tattgtggga gggaaccag gggaggtaat 300  
 tgaatcatgg nggctgatct ttcccatgct attcttctga tagcgaataa gtctcacaag 360  
 atctgatggg tttatc 376

<210> 18023  
 <211> 422  
 <212> DNA  
 <213> Glycine max

<400> 18023

agtttcttag ttatattgat gcagatggag ccattctctc aattaatatt ttggcttcag 60  
 caagagtcac gtctccaagg gctccaccac tagcagcacc taccataact ctctccatat 120  
 taactgaatcc ttatataaaa tattggagaa gaagttgttc tgaattctga ttgtgggggc 180  
 aactggcaca tagtttctta aatctctccc gagaatcata caggtctctc ccactgaatt 240  
 gtttaatacc ttgatatatc ttctctatga ctctgtctc gaaaacaaag aataatata 300

ctaagaatac tctcttaaag tcatcccacc tcttgatgga ccttgagaca agtaatacac 360  
 cagtcctttg ccactctct aatgaatgac gaaaaccttc agaaaattgg acctcttgac 420  
 422  
 at

Glycine max

<223> unsure at all n locations  
 <400> 18024

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 accaaaatac aaggcccaga cgaaggaaat acctattcta atatttaca agataagcgg 180  
 gctcatactt atcccatggg ctcgaaatct accttaagc tcatgagaac cctagggcct 240  
 taacttggat ctctaacca atctacgtg tgtctttctc ccaatgcctt tgcggggt 293

<210> 18025  
 <211> 409  
 <212> DNA  
 <213> Glycine max

<400> 13025  
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 ggttttacaag acaataattg gagcttattg gaaggttgaa acctacaaaa ctgccttat 180  
 tgccaaggya tattgtcaaa aggaaggtat agattatgac ataacttttg tcccatggcg 240  
 atactcaaat caatttggat gcttcttget atattagcat actatgatca tgaaatatga 300  
 tatggatgtg gaaaatggct ttccttaatg gtagctata ataactgtg tgtatgacaa 360  
 aacttgatgg atcacatctt agtcttatca taataaagtc tacaagttt 409

<210> 18026  
 <211> 413  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
<400> 18026

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tttcttctct ttttctctct ttttctctct ttttctctct ttttctctct  
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gtgataggca gaactcattt gcaatttctt tccacgcaat cgaagagact ctggcctaaa 360  
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<210> 18027  
<211> 413  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18027

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tttcttccat tgatagagtt cacttataat aacagttttc actctaccat tggcatggct 180  
ccctatgaag ctttgtatgg tagaagggtt aagacacccc tatgttggtc aaagcccgga 240  
gaaggcctca ccttatgacc agaagtggta caacaaacca ctgagaaagt taagttaatt 300  
catgatagga tgagaacggc tcagagtatg caagaaagtt atcatgataa gaggaggaaa 360  
gatttgggaat tcgaggttgg tgatcatgta ttcttaagag tcaactccgtg gac 413

<210> 18028  
<211> 409  
<212> DNA  
<213> Glycine max

<400> 18028

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atccccaaat cagccctata cccggagctc accaaatcct tcaacaaatc aaaagccaat 120  
craaccttac cctcaacac aaacgctca accagggctc catataacac cctatccacc 180

aaapaadccct tccccttcat ctccttgaac aactcatacc cctcctgaac cctccccccct 240  
 ttgtgcagcc ccacaatcat ggttagcatat gcttcacat ccggcaccac ccggggccctc 300  
 ttcatctact cccaaadccct cagacacgca tgcagattac ctgcaggcac cagaatcttc 360  
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<210> 18029

<211> DNA  
 <212> Glycine max

<223> unsure at all n locations  
 <400> 18029

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 ttcacagaagt tgcctacaaa caaacgggtca ccatctgaaa caatgggaaga tggaaatcca 180  
 tgaatcttta caatatcttg tagaaaaact gcagctactt cggtagcggg gaagggatgt 240  
 cctaattggta tgaagtgggc atattcagtg agtcgatcaa ccacca 286

<210> 18030  
 <211> 351  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18030

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 acttcttact ctgatgtctg attcgggtccc gtaatatatt gaaacgctcg atattgaaag 180  
 ttgaagctct gagcaacttc taactacaat aactctttac tcggatgtgt gattcagtc 240  
 agtaatatat cgagacgctc gatattgaat gttgaageta tgagcagatt caaacgacaa 300  
 taacttttta ctgggatggc tgaatgagac ccgtaaatat caagacgctc g 351

<210> 18031  
 <211> 398  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
<400> 18031

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gtttatata aggcctttaa tggcctaaa cctattctaa tttttctaaa gctctat 180  
ctctaaccttg acccaggggc tcagaaatct accttgaggt ttatgagaac cctatggcct 360  
tgcttggtag ctctagccca atcctcttgg agtcttct 398

<210> 18032  
<211> 428  
<212> DNA  
<213> Glycine max

<400> 18032  
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gatccctgtc agatacaata ctagaaggaa ttccatgcaa ccttactact ttcttgatgt 120  
acaactccac tagctttctc attctatact tcatactcac cggaataaaa tgagcagatt 180  
tggtgagtcg atctactatg acccacacag catcatgtcc acgactagtc ttaggtaaac 240  
tagatacaaa atccatagat atgctctccc atttccattc cgggatttcc aatggcttca 300  
attctcccga tggtegtctg tgctcaacct tagccttttg acatgtcaaa catcttgcta 360  
catattcagc tacatctttc ttcatgccat gccaccaaaa acttctcttc aaatcttggt 420  
acatctta 428

<210> 18033  
<211> 411  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18033

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aaaggattgt gatttttaat acaagttact ttaattatc aacgttctac gtaaattata 180  
tatagcctct ccaagcctaa cacaacaata ttgagctca tttgaattt gaaataataa 240  
ctaagactt ataaattgaa tgaatttggg attatatttt caattataca atgatttgat 300  
tattatattt ttgagctatg actattatga aaaaataaact ttaattattt atattatga 360  
tattatattt ttgagctatg actattatga aaaaataaact ttaattattt atattatga 420

<210> 18034  
<211> 119  
<212> DNA  
<213> Glycine max

<400> 18034  
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tacaatactg cacactatc tcatacatcc ttcccaacac atagtgcctc aaattcccat 120  
ttgctccaa taaattctca ttgcacagaa actcactcgc acaaaccttc tccactttcc 180  
catagaagtc atgcaagaag acatgagctt tatggttccc accctttttg ctcttgggga 240  
gaacaccaac ggtgaatata gctgacatc ttccaggagc atctggccag tccccgctg 300  
tgccgtcaac caatatgac 319

<210> 18035  
<211> 431  
<212> DNA  
<213> Glycine max

<400> 18035  
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gactgatcat tagaaccaat gaacttagtg acaatctctc ttgacaaaag cttctctcga 120  
ataaaatggc aatcaatctc tatgtgctta atcctttcat gaaagactgg gtttgaggca 180  
atatgaagag cagcctgatt atcacaatac aaettcattt gaaactcttc acaatactc 240  
aattcttgta gaaattgttt aatccacgag ttccacaagta accatagcca tagatcgata 300  
tttagcttct gacttgacc aagcgacaag tgtctgttcc ttgcttttcc aagagataag 360  
aatctctca atgatgacac ataagcctga ttgagacctc ctatccagg gacagccagg 420  
caatctca 431

<210> 18036  
 <211> 386  
 <212> DNA  
 <213> Glycine max

<213> unsure at all n locations  
 <400> 18036

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 aagctctgag caaattcaaa cgacaataac ttttactcgg gatgtgcatg tgagtcctgt 240  
 aatattgtaga gacactcgga attgaatacc gaagctatga gcaaattcaa tcgacaataa 300  
 cttctactc ggatgtcgga ttgagtcacg taatatgtcg agacgtctta tatagaatac 360  
 tgaagctctg agcacttca aacgac 386

<210> 18037  
 <211> 406  
 <212> DNA  
 <213> Glycine max

<213> unsure at all n locations  
 <400> 18037

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 tatgtctgaa gtttagtaca tatgcttgta ctacaatttc aagatcctaa gatgttgagn 120  
 ttttaattaa accatgtgtg gcaggaaatg aatgtttctga gagattggca tactatggta 180  
 tgagtacaaa cctggtgaac tatcttctgg agcgtttcaa ccagggaat gcaaccgctg 240  
 caaataatgt cacaacctgg tcaggcacat gctacatcac accattgath ggagcctttc 300  
 tagctgattc atacttgtag agatactgga caatctccag tttctcaatt gctattagtt 360  
 attgtagttt agagatnntt tttttcttgt ttgttgagtc cccatg 406

<210> 18038  
 <211> 395  
 <212> DNA  
 <213> Glycine max

<400> 18038

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taaccttaag cttgcaggac caagcttctt atgccatacc cagtgatgct ctttgatcga 120

gagtaggcac aacacttttt tctcttgaca aatcaccaag tgtaatgtca tacagatttc 180

ttgctctctt aattcaaaa aattcaagatc tctctctt tctctctt tctctctt 240

tctctctt tctctctt tctctctt tctctctt tctctctt tctctctt 300

tctctctt tctctctt tctctctt tctctctt tctctctt tctctctt 360

tctctctt tctctctt tctctctt tctctctt tctctctt tctctctt 420

tctctctt tctctctt tctctctt tctctctt tctctctt tctctctt 480

<210> 18039  
<211> 416  
<212> DNA  
<213> Glycine max

<203> unsure at all n locations  
<400> 18039

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tatgcaagtt gaaagccttg gaggaagag gtatgcctat gttgttgtgg atgatttctc 120

cagatttacc tngttaaact ttatcagaga gaaatcagaa acctttgaag tattcaaaga 180

gttgagtcta agacttcaaa gagagaaaga ctgtgtcatc aagagaatca ggagtgacca 240

tggcagagaa ttgaaaaca gcagggtcac tgaattctgc acatctgaag gcactactca 300

ttagttctct gcagccatta caccacaaca gaatgggata gttgagagga anaacaggac 360

cttgcaagag gctgctcggg tcatgcttca tgccaaagaa cttccctata atctct 416

<210> 18040  
<211> 346  
<212> DNA  
<213> Glycine max

<400> 18040

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aaacgacaat aactattgac tggatgtccc gaatgtgtcc tgtatttatc ccagatgtct 120

gaaattgaaa actgaadctc taagagaaat catatgacga taacttttta ctccgatgtc 180

gaaatgaatc ccttaataaa tccagacact cgttaatgaa aatggaagct ctgagcaaat 240

ttaaacgaca atacttttg actcgaatgt ccgattdagt acatttatat atcagagacc 300



tcgtaattga aaacagaagc tctgagcaat atcaaacgac aataac

<210> 18041

<211> 422

<212> DNA

<213> Glycine max

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aattgagagt aaaagataga attttgatga atgaaatgat taaaaaattg agacagtgat 180

caattattga aaatataatt attaaagatt tgaattgatt aagtgcctaga tataaactag 240

tcctaaataa aattataatt ctccatgtaa atgagttgaa caaaaattata atctctgtaa 300

atctatttta atgtcaaacc taccaaaatt taaactaacc gctcaataaa tgtaaatttt 360

aaacttaaat taattttattt aattaaaaaa taagtttaac tacatattta ataaattaaa 420

422

tt

<210> 18042

<211> 431

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 18042

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gtgtcttact agcttagccc catcttctaa atttatctga tgcatacata tggatgggct 120

aataccagga atgtccacca gggccaacc tatatcttc ttatgcttct tgagaataga 180

taatagcttc tcttcttggc catcagcaat ggaggcagat ataattactg gaaaactttt 240

gctatcatcc aagtaagcat attttaaatt tgaatgacaga ggcttcaatt ctgggtgtgg 300

gggctggata ggggtagaaa gggatgggtt ctgagcctgt acctcataaa gaaagtcaga 360

ggatgtgtga ctctcgtaaa catggttagt tctatctgac tctataaaat caatctcaag 420

431

aggtaaaaaa t

<210> 18043  
 <211> 359  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18043

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 tgaagtctaa ttccaaatga tcagagttga ataatttcac acacaaggcc tctatttata 300  
 gottcaatgt cacacaagat tggagagaaa tatgaatctc tattcaaatt tcaactcgaa 359

<210> 18044  
 <211> 423  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18044

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 tntagaaagg agtggccgcc actgtggttg cggttgcgca ctaattcgaa tatgttttagc 180  
 ggaagttaac ggtggtggaa taagttagtc gaacgttcca attggaagga gcaacattcc 240  
 atgcaataat agtctccctg gtggtgtatg aagtgattct gacagaaaga gcttggccac 300  
 ccagagttgc aaatgcttga taagaagccc ccagttgtg gctcatgcta atccatccac 360  
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 ata 423

<210> 18045  
 <211> 412  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18045

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 gacatacatr atgtaatact gtigaaaaaa tttcaatccc gattagctaa aaataatggt 180  
 aaattaaat atatacaaa ttttatttc ttttatttc ttttatttc ttttatttc 240  
 ttttatttc ttttatttc ttttatttc ttttatttc ttttatttc ttttatttc 300  
 ttttatttc ttttatttc ttttatttc ttttatttc ttttatttc ttttatttc 360  
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<210> 18046  
 <211> 382  
 <212> DNA  
 <213> Glycine max

<400> 18046  
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 gtcattgacc ttcaaaaatat aactgtgtaa tgcattacca gaaacctgtt atcgattacc 120  
 ggtgataaaa tttcaaaaat actttttgag agacacatgt cttcaaaacta ttttgaaaag 180  
 gcacgatggg cctatatatg tgtgtgtgtg tgtgtctgac tttaaaaagc aagagagaga 240  
 tattctatga gaactcaatt ggcaaatgct ctctcaacaa ctcttgggca aacacttaca 300  
 aatctattga gaattcttct aagatcttta atgtgtatca tctactctaa aagagagaaa 360  
 tctttctggt catcttgaac tc 382

<210> 18047  
 <211> 439  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18047

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 gacagcttcc caaggtctgc tttccaatga ttgaggaag gccacccttc ttgctttcca 180  
 atattcaatg ttgctttcat ccaaatgttg tttctgttcc actgtgtccc cttcttcttc 240  
 catgttcttc aaaaatttat cttctatata tcaattgttg attttagtta ttggtctga 300

taccaattga tattctgata ccagnggaca gatgtcgtac atgatgtcac gacatcacgc 360  
 ttcagaacat gcagattata tgtgtccgta tgaacagatt aaacaagtta ataacacagg 420  
 agaattgta cccagttcg 439

18048 Glycine max

<213> unsure at all n locations  
 <400> 18048

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 ctcttcgaga tgcctatccc acacatcaac cttgtctttc cataattttc tcaagtcttc 180  
 aatctacgga gtaagataca catcaatata attccttgac tgccttggac tcgctatcat 240  
 catacatagg ataattgtatn ttcacttcat gcacaacgaa ggagggaggt tgtaaactat 300  
 cagcaaaaca ggccatgaac tgtggtttgt gcttaagttt ccaaaatgat tcattttgtt 360  
 tgaagcaaga g 371

<210> 18049  
 <211> 373  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18049

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 tccaaccata cacatcaaat attcacttag tgcgtgtgaa attacaaaac taccctaat 180  
 acaaaaacta gtcttgggtgc cctaaaatac aaggactgaa aaatcccata ttcttagggt 240  
 accttacctt cattatggag cctaaaatac aaagacccaa attaatgaaa ccttaatera 300  
 atatgtacaa agataagttg gctcatactt agccttggg cccgaaatct atcctaagac 360  
 tgaagcaaga g 373

<210> 18050  
 <211> 461  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18050

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 caaagacatg ttttcacaac acttagagggc actagagggt atcttgcacc tgagtggatc 360  
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 atcattgggg ggaggaaaaa ctatgatcct agtgaaactt c 461

<210> 18051  
 <211> 342  
 <212> DNA  
 <213> Glycine max

<400> 18051

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 cggacttccg tgtgataaga tatgaccata tgaatttctc gagagcttcc gctgttcaat 180  
 ttaagcttc tcgatatatt atgcacctga atcagactct ccgttgaaaa gttatgacca 240  
 ttggaatata tcgacagatt ccgatgttca atttcgagcg tctcgggtata ttatgcgtca 300  
 gaatcggact ttcgggtgac gagttcgacc atatgaattt ct 342

<210> 18052  
 <211> 405  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18052

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 agattaaatg catattcata gacaagattc taaaggaaaa gggaaaggaa gcaatgaaga 180  
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<210> 18053  
 <211> 302  
 <212> DNA  
 <213> Glycine max

<225> unsure at all n locations  
 <400> 18053

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 cggacatccg tggaaaagat tattgacgct tgaatttgca acgagcttac aatttcaatg 120  
 tggagcgtct cgatatatta cgggactcaa tcggacatcc gagtaaaaaa ttattgtcgt 180  
 ctgatttgct acgagcttcc gttttcattt ggagcgcctc aatatattac gggactctat 240  
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 cg 302

<210> 18054  
 <211> 430  
 <212> DNA  
 <213> Glycine max

<213> unsure at all n locations  
 <400> 18054

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 tgcagcttt ccaggttctg ctatccagtg atttgaggaa ggccaccatt cttgctttcc 180  
 aatattcata gntgcttcca ttcgagaatg ggggtctgtt caatggctccg ccttctttct 240  
 ccaggttcat caaatntat ctccctagat ctccactctgt gatttcagat gttggctctg 300  
 ataccaattg aaattctgat accaagggaac agatgtctga ccggatgtca ccacatccag 360

cttcagaaca tgcagattgt atgtgtccgt ntgaaccagt ataacaagta aataacacaa 420  
 gagaattggg 430

<210> 18055  
 <211> 342  
 <212> DNA  
 <213> Glycine max

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 atcttaggta ctataacata actattctgt atacggctct ttgtattgct aatgctatat 120  
 atgctacatc atattttgat aaataaatac ttttaggtag tataagatca tagtttgaat 180  
 cgtaatgtta tatggacatt agatttacgt tatatgataa attacgaata cttttacata 240  
 ctctaagggt taattttata tggtaacatta agaatatctt taattttgat atgatacata 300  
 agcttacttg aaatttcct 319

<210> 18056  
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 <212> DNA  
 <213> Glycine max

<400> 18056  
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 taaaaagtta ttgttggttg aatttgctca gagcttcaac attcaattcc gagcgtctcg 120  
 atatatgacg ggactcaatc agacatccga gtaaaaagtc gttgtcgttt gaattggctc 180  
 agagcttcaa cattcaattt cgagcgtctc gatatgtgac gagagtcaat cagacatcca 240  
 agtaaaaagt tattgtcggt tgaatgggct cagagcttca acattcaatt tcgagcatct 300  
 cgatatgtga cggggctgaa tcagacattc gagtaaaaag tt 342

<210> 18057  
 <211> 428  
 <212> DNA  
 <213> Glycine max

<233> unsure at all n locations  
 <400> 18057

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ctcggatgtc taattgacgc ccgtaatatata tggacacgct cgaaattgaa tgttgaagct 180

ctgacgaaa tggacgaaa atgacgaaa atgacgaaa atgacgaaa atgacgaaa atgacgaaa 240

atgacgaaa atgacgaaa atgacgaaa atgacgaaa atgacgaaa atgacgaaa atgacgaaa

atgacgaaa atgacgaaa atgacgaaa atgacgaaa atgacgaaa atgacgaaa atgacgaaa

ctcggagcaa attcacaaga acaataaactt ttactcggat gtttgattga gactcacaat 420

atctcgag 428

<210> 18058

<211> 430

<212> DNA

<213> Glycine max

<213> unsure at all n locations

<400> 18058

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taaataaaaac ttggactgct gaggatcttc catgtggaaa ggttccaatt agttgcaaatt 120

gggtatataa aatcaagtat catgccaatg gcacaaatag aaatgtacaa cgccaggctt 130

gtggccaaaag gttacactca gatggagggt gtatactact ttgacacttt ttcccttata 240

gccaagatga ctacagttcg tgtgttacta actgtcgctg ctgataagag tcggcatctt 300

gacaacttga tgtcacaatg ctgtcttga tggaacttga atatgaagtt atatgctctt 360

ctcttggtat gatctcttac tcttcagtat cgaattaaca ttccttattg ggtgaccaac 420

taacgctcatg 430

<210> 18059

<211> 317

<212> DNA

<213> Glycine max

<213> unsure at all n locations

<400> 18059

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attcagaatg atgagatga tggatcaggg ccatgaacga agcattgctc cctctatgaa 120



agcttccatg gcagtggaaac tcattccaaa atctcttgaa tttacgtctc agaattctcc 180  
 aaaaagcctt aataaagttg aaattaatac catcggggacc tcggcatcta tcaccaccac 240  
 aactccaaac agcatcttta atctctcgat cagataaagg cgcaatgagt cctctctct 300  
 atttttatac aatggag

<210> 18060  
 <211> DNA  
 <212> Glycine max

<400> 18060  
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 cttttaacte ggaggtccga ttcacgcgga tgatatatcg agacgtccca atttgaacaa 180  
 tggaagcttt tgaacaattc aaatggicat atattgtcac tcggaggccc gaaactagcg 240  
 cataatctct cgagacgctc aaagagaaca aacygaagct ct 282

<210> 18061  
 <211> 427  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18061

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 ggtacttgca tagatataaa gaggttgagg tagaccataa taataaggtc aatcttcaag 180  
 atagagagaa taatagtctt gaagagaacg acgatgaagt atttcaattg agtaatagag 240  
 tgggttaaggt ttgatgacca attattatgc ttagtgtgaa gtagtaatta attaaggctt 300  
 ttttgggtt gacattactt tctttgtata cttttattgt cttaaattgaa ttgattttagc 360  
 ttgcttagaa caagaattct tgggttgcct tctttcttct tctttcttct ctntataact 420  
 atataact 427

<210> 18062  
 <211> 239

<212> DNA  
<213> Glycine max

<213> unsure at all n locations  
<400> 13062

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gagatcatg aatgggaaac acgggggccc aacataaat ctatgttgc aaagatcaa 120  
gagatcatg aatgggaaac acgggggccc aacataaat ctatgttgc aaagatcaa 180  
gaacttcac taagatcttg ggaaaattca atggaccac ctgttcttc ctgtgataa 240  
tccttcaaag aaaaaatgaa catgtacata aatgatgtat tatataaaac aaacattat 299

<210> 18063  
<211> 298  
<212> DNA  
<213> Glycine max

<213> unsure at all n locations  
<400> 13063

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gaaccccatg aatgtcattg cctagcgcta ttcattgtgc ctccaccttc gagtctggag 120  
ccccacgaat gtcattgcct agcactgttc gctaattctc cattcttcac ttttattcgg 180  
agccccatga atgtcattgc ctagcgctgt tcatgtgtcc tccaccttca agtttggagc 240  
tatgttcat tattgcctaa gtgtggaccc tetagtgcaa tcttccattc ttcacttt 298

<210> 18064  
<211> 440  
<212> DNA  
<213> Glycine max

<213> unsure at all n locations  
<400> 13064

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ttccatcaa tggattcctt tgcttttttg aagatgaatg acaacgtaat ggagaagcaa 120  
gagagagagg agacgccact tcaaggaaaa gtgagctctag aagaagctca ccaccataag 180  
aggccatgga taagagctta gaggaagaag gagatgaatg aaggagagagg aagagaagag 240  
caccgaaatt tghctcttaa aagagctctg aaatctgaag ttaattatc aaatgaccaa 300

agttgaaaaa aatgcacaca catgacctct atttatagcc taagtgtcac acaaaattgg 360  
 agggaaattt gatntcaatt caaattccact tgaatttgaa ttgaantgtg gagccaaact 420  
 tggaccaaat tractaatat 440

<210> 18065  
 <211> 281  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18065

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 atatatattact ggactcaate ggacatcaga gtaaaaaagt attggcggtt gaatttgcgc 180  
 agagcttcga gattccattt cgagcctctc gatatatgac gggactcctat cagacatccg 240  
 agtnaaaagt taatgtagtt caaatttgcg cagggcttcg gaattccatt ccagagcgtc 300  
 tcgatgtctt acgggactca atcagacatc cga 333

<210> 18066  
 <211> 281  
 <212> DNA  
 <213> Glycine max

<400> 18066

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 ttactcggat gtctgattgg gacccgtaat atatcaagat gctagaaatc gaatagggaa 180  
 gcgttgatca aattcaaaca gacaaggact ttttactcgg atgtgcaatt gagactcgca 240  
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<210> 18067  
 <211> 442  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18067

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 aaagaactact caaagtaggc agaaaaacta tcaggctgct caagaataac tgagaaggtc 180  
 aagttatcc aaaaaagctt aaagacttct caaataatct aactatca tcaaacacag 240  
 aatctctcaa atgagttact cctacggcat aaaaagtgc attactctt tctttaca 300  
 atcttgacaa tatctatcat gt 442

<210> 18068  
 <211> 319  
 <212> DNA  
 <213> Glycine max

<400> 18068  
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 aaagagattt gaacattaat caaataagtt aatttaaaat atagaattgt ctttaattgga 120  
 ataaataaga acaaaaattga tttaaacgaa aaacttatct caaatacgtg aatgttatta 180  
 ttgaaacttt aatattatt taatatttga aaataatttt atcaattaat ggttaaacad 240  
 gattcgagaa tgaatatgt acttattata cttcattctt ataagtgggtg attacatgat 300  
 ttaaaatatg aggttatcc 319

<210> 18069  
 <211> 289  
 <212> DNA  
 <213> Glycine max

<400> 18069  
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 atgagacatg gtgccaaaca aagtcagggt aacgataact cgcctgtgct tttcttcca 120  
 tgcctatagt agcaaaagtc ttgatctagt catgtttgat gagttggaaa atgagggcgc 180  
 aattatactg tgcagacgg agatgtactc tccccctgcc tctatgaca tcatgattca 240  
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<210>	18071
<211>	420
<212>	DNA
<213>	Glycine max

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<400>      18071
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tctaagttt tcttttccat tgtttaatac aaaacactcg caacccaaaaa catgaagatg  120
cgagatgttt ggtttcctaa cattgaacag ttcatatgga gttttcttta aaatgggtct  180
tattaaagcc ctattcatga tatagcatgc agtattaacg gcttcagccc aaaaatattt  240
tggaagaaga gtatcattta ataaagtctt agcaatntct ttcaaagaac tatntttcct  300
ttcaacaact ccattntggt gaggggttct aggtgcagaa aagttatggt cagtgtcatg  360
cttatcaca aataaatcaa attatttatt ttcaaaatca ccccatgata anctctaata  420

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2230 unsure at all locations  
2400 1872



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<210> 18076

<211> 391

<212> DNA

<213> Glycine max

<400> 18076

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 aacaaccgtt gacatggaac tcattccaaa atctcttgaa ctctggtttt agcacactcc 180  
 agaattcctt aataaaattg aaattaaaac cgtccggccc atggcaetta tcttcaccac 240  
 aactccacac tgcctgctta agctcctggt ctgagaaagg taaaattaaa cctcctctct 300  
 gcttttgatc aagagaatgg aattgaactc catcaatggt aggcctacag ggattctgct 360  
 caaataatct gttgagaaag atagtcacag cgcctatctt caactcctct ggttgctgga 420  
 cccacag 427

<210> 18076

<211> 391

<212> DNA

<213> Glycine max

<400> 18076

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 cttttccacac ggaggtcaga ttcattgcga taatatatag agacgctaatt aattgaacaa 180  
 cgggaagcctt cgtgatatgc aaattggcat aacttttaac tcggatgtca gathcaggcg 240  
 cataatatat cgagacgctc gaaattgaac aacgggaagct ctctagaaat ataaatggtc 300  
 atatchatta actcggatgt gtgattcagg cgcataatct atagagacct ctaaaataac 360  
 aatggagctc ttggcaatca aatgtcataa c 391

<210> 18076

<211> 339  
 <212> DNA  
 <213> Glycine max

<400> 18077

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 aatgaattta aatcagaagc ttatgaatg aaaaagca ataacatttt atttgaattt 180  
 atogaatttg aagacagaag ctatgaatga atccaacga caatcatttt atttgaattt 240  
 gtccgatgga gtactetaat atatctagac tcttgagatt gtcacagaag ctctgagcaa 300  
 attcattcga acaatactgt attttcgaat gtccaatgg 339

<210> 18078  
 <211> 363  
 <212> DNA  
 <213> Glycine max

<400> 18078

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 gatataattaa gaaggggggg ttgaattaag atatcccaaa ctattttccc aattaaaaaa 120  
 ttatttcact ttcttttcaa gttatagatt cccttaacaa tgaacttctt aaatattaat 180  
 tcaaatcaaa caatttgaat atgaatgtaa agcgataata aacaaaggag attaagggaa 240  
 gagaaagtgc aaactcagat ttatactggt tcggccacac ccttggtgctt acgtccagtc 300  
 cccaagcaac ccgctggaga gttccactat cttgtaaatt ccttttataa gttctaaaca 360  
 caa 363

<210> 18079  
 <211> 387  
 <212> DNA  
 <213> Glycine max

<400> 18079

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 ctccagctgtt ggaggacctt ttaaaagcat ggtgcttaga gtagaaggga agttgggaga 120  
 gttttctcc attuatadag ttcacttata ataacagtta tcaactatcc attggcatgg 180



ctccctatga agctttgtat ggtagaaggt gtaggacacc cctatgttgg tcaaagcccg 240  
 gagaatgect cacttatga ccagaagtgg tacaacaaac cactgagaaa gttaagttaa 300  
 ttcacgaaaag gatgagaacc gctcagagta cgcagyatag ttatcatgat aagaggagga 360  
 atgatttaca atcaaatca gtaataca

<210> Glycine max

<213> unsure at all n locations  
 <400> 18080

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 attattaaca tctaattgga gaargcaca attcttagta gcatacaaac aaagtaaaac 180  
 tctcacagtt gtaagcttgg ccaactggaga aaaagtgatg tatctccatg tggaacttgt 240  
 aagccttgaa tcttctttat caatggagtc ctttacttct tgaatatcaa tggccgcgga 300  
 atggagaacg aagaaagatg attggaga 328

<210> 18081  
 <211> 466  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <410> 18081

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 taatgagtnt atgagcaagt caggattcaa cagatgtgac atggaccatt gttgctacgt 120  
 taigatatat actaatagct atgttatect tgtcgtgtat gttgatgaca tgttgatgce 180  
 agyatctagt atggcagaaa ttaacaggtt gaagcaacag ttggcagaaa acttttggta 240  
 tgagaattct tagaaacata tcagaaggaa ttatgaagct gcttcaryag aaatatatac 300  
 acaagtract tgacagutta taccttgaag attctaaagac tangaatacc cctttgggat 360  
 ctcatatga agtttcaaac aagcaatctt tgtadacaga tgaagaaaaa tctacatug 420  
 taadacatcc atatgcata tcagtcuaca gtttgatgto cgttat 486

Available at all locations

<210>	18083
<211>	414
<212>	DNA
<213>	Glycine max

LINE	18084
LINE	337
LINE	DNA
LINE	Glycine max

100

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 tacaactctc gtaaatggga gagaaatggt catctatagc atacaagtc ctaatgtcat 120  
 caaatcttat aattagagct cctacagagc aaaaaaatgt ggtctcttta gagagggcat 180  
 atgagagc cctatgagc cctatgagc cctatgagc cctatgagc cctatgagc  
 atgagagc cctatgagc cctatgagc cctatgagc cctatgagc cctatgagc  
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<210> 18085  
 <211> 386  
 <212> DNA  
 <213> Glycine max

<400> 18085  
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 ggtttcagag gccacttcta ccacaggtac taggaaatta tctcaaaggt tgtctataat 180  
 tctgtcttcc aactttattc ataagaattg gcttctcctt ggattttaa caaacatttt 240  
 ttgcctttat tcttaaattt ccataagacg atagaataga aaacttcaga cccactgctc 300  
 tgggtaattc ccaatctaag attatctcta aaatcgtcac aagtagattg gcctaaatta 360  
 ctcttaagct gatgtttaat aaccaa 386

<210> 18086  
 <211> 419  
 <212> DNA  
 <213> Glycine max

<400> 18086  
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 gtaaccaatct taccacaaa ggtctctcaa aagtgaactaa tgaattttgc atccctatca 180  
 ctgacaatgc tctcggtaa tccatgaagc cgcactattt ctttgaaaaa caaatcagcc 240  
 atatgacaag cctcagccac tttcttgcaa gggatgaatt gtgcctatt atataacctg 300  
 tcaacaacaa caaacacaga atcttctca tttcttgtaa tggcagccc caaacacaaa 360

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<210> 18087  
 <211> 449  
 <212> DNA  
 <213> Glycine max

<400> 18087

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 caaattttta tggaggcaat agacttaaac atttgggaag ccatagaagt tagaccttat 180  
 gtaaccacca tgggtggctg aaatacaaca atagagaaac ctatacaaga gtggtatgaa 240  
 gatgaaagaa gattattgca gtaccaatta taggctaaaa acatcattac ttctgacctt 300  
 ggaatggatg gatattttat ggtttcaaat tgaagagtgt ctaagaatat gtgggacact 360  
 ctacaagtta caatgaagg aacaactgat gtcaaacgat ctaggataaa tactttaact 420  
 catgagtatg aactattatg atgagaaca 449

<210> 18088  
 <211> 395  
 <212> DNA  
 <213> Glycine max

<400> 18088

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 gcagtgtaat cgattaccat aagacaattt tgaaaaatag ctgtctaaca ggattatgaa 120  
 tttgaattat gacctgttaa tcaattgatg tttgttatcg attaccagca acagaactct 180  
 tgaaattcaa attcaaaaagt catgacctt cataatataa cctgtttatc gattaccaga 240  
 aacctgtaat cgattactag tgaaataatc agaacaagct ttatgaatag acacatctct 300  
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 aagagagaga tattccaaga gaacttcatt gtcaa 395

<210> 18089  
 <211> 447  
 <212> DNA  
 <213> Glycine max

<400> 18089

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atctatctt atctatctt atctatctt atctatctt atctatctt atctatctt  
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atctatctt atctatctt atctatctt atctatctt atctatctt atctatctt  
cttggatad aataattttt atctatctt tactctctt aatgttctt atctatctt 360  
cgaataaca tatttatctt ataaattttg ttctttatta tatttatctt tctctatctt 420  
tattttctt caccattga cctaat 447

<210> 18090  
<211> 420  
<212> DNA  
<213> Glycine max

<400> 18090

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gaagttgatt ggaatgaacag ttcatctctg aacttgggtga gctaccttca ataggaggac 180  
cgattccact attgtgtgac aatatggagc tctggtttta gcaaataacc aagattacac 240  
cataagacca aacatatttt atgaacgtat cacttgatta gagagatcat tgaacgtggg 300  
gacatttaga ttgaaaaggt ggatataaaa gagaatgcaa catatccatt caccaaggca 360  
ctttgcataa aagaatttat caagcacaag gtggaagta tgatgaagtc atgagtaatt 420

<210> 18091  
<211> 366  
<212> DNA  
<213> Glycine max

<213> unsure at all n locations  
<400> 18091

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ataacacat ttgtatgaca ttatcattt ttctgaccac tacttgaaaa ggaacatctt 120

cttttggcat aagtcttctg aaggggaacg tttcttctt aaaatgcacc catacctagt 180  
 caacttggtc aaatgttact ttttttctta ctttctgttc atactatcga tacaattctt 240  
 tttcttctt ctcaatttgg gcattgaatt tctcatgcaa cttcttgaca tatgctgctt 300  
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<211> 18092  
 <212> 436  
 <213> DNA  
 <214> Glycine max

<223> unsure at all n locations  
 <400> 18092

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 catccatata agacacaaac tgcacctctt gaacacacat gatcttaacc ctaacaattt 180  
 acattgagca agcttaagca gtgatcaaac ttgctctttg gaactggctt tgtaaacata 240  
 ttagcaggat tgtgcagagt gataatctta tgaactttga ttcttcttct tgaccgaatg 300  
 aagtgatata taacatctat atgcttggtt ctatcatgat gaacctaatc cttggccaag 360  
 catatagcac taaggctgtc acagtagatg ttagcatatt cttgattaat ttcgagatca 420  
 tctatcagac ctctca 436

<210> 18093  
 <211> 429  
 <212> DNA  
 <213> Glycine max

<400> 18093

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<212> DNA

<213> Glycine max

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aaaataagga ggaaaatctt accattcaag gaaaactaaa acaggetgaa gacaatatca 360  
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ac 431

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 agcttctccc gaataaagtg acagtcaatc tctgtgtgct tggttctctc atggaagact 300  
 ggatttgaag caatatgaag agcagcctga ttatcacaat acagcttcat ttgcatcact 360  
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 gccata 426

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<213> Glycine max

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<211> 371

<212> DNA

<213> Glycine max

<223> unsure at all n locations

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<210> 18107

<211> 418

<212> DNA

<213> Glycine max

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 <211> 390  
 <212> DNA  
 <213> Glycine max

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<210> 18109  
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 <212> DNA  
 <213> Glycine max

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 aattcgattt gaggacaaat ccttctcaag agggagagaa taatgaggac attttcaada 360  
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0212	DNA
0213	Glycine max

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<210> 18113

<211> 345

<212> DNA

<213> Glycine max

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<210> 18114

<211> 382

<212> DNA

<213> Glycine max

<223> unsure at all n locations

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<212> DNA  
<213> Glycine max  
  
<223> 18115

taataagagg catctaaagt gggtagagtt tttagtgcaa ttcccatatg tcatcaaaaca 6  
taaaaagggg aaagggaatg tagtggttga tgcaactgtct aggagacatg ctttaacttgc 120  
tatgcttgaa actaaactgt ttggtctcga gtctttgaaa gacatgtatg tgcattgatgt 180  
ggactttgct gaaatttttg ctgcatgtga aaagtcttct gaaaatgggt actataggca 240  
taatggattc ttgtttaaag caaataaatt gtgtgtgcct aagtgttcca tttagagagtt 300  
gcttgtgagt gaatcacatg aggggggggt gatg 324

<210> 18116  
<211> 273  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18116

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tcaggatttg tgggtgcttg aataatgatt ttaaccacagg cattatgtac atgtacatct 120  
tggattcctt cacttacaag atgctccaag aattgagtan caagcggaga cgattcctat 180  
gcataanaaa ttaaagaga aataaacatg gcaatgatag tggagatgaa agctagagag 240  
aaaactagca cactcttct cacttcttc aac 273

<210> 18117  
<211> 356  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18117

agtttttct cttgcttct atggnggaga gtttcttca gactcactt cttcttgaag 60



tggcgtctcc tctctctctt cctttctcca ttcgctgctt attcatcttc caagaagcaa 120  
 aggaatccat tgatgaagaa gactctaggt ctacaagctt caatggagct tgcacacat 180  
 tattacaaaa gcattaggaa ggcacaaatt tcagatattt cttggcaagt tgggcattcg 240

<21> 14114  
 <211> 385  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18118

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 atcgtttgta tccggatatt agcaaaagag aaagaaatct tatgcttgga gtagctagtg 180  
 atggaatgaa tccatattggc agtttaagca tgcaacacag ttcattggcca gttntgctag 240  
 taatttacia ttgtcctccc tggttgtgca taaagcgaaa atacatgatg ttgtctatga 300  
 tgatattcagg cccaagacaa ccatgaaatt acattgatgt ttatctaact ccgttgattg 360  
 aagacttgac taagtattgg gagat 385

<210> 18119  
 <211> 385  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18119

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 aattgattct caacctcatg ccttaacttt gaaaaaaact ccattctctga atcaatagca 120  
 gctcgtctct tactcaatgc aaggttatct tctctctctt cagctcttaa cctttctaac 180  
 tcaagtcttg cctctctagc cactcttcca acagaaacta tcttttctct ctctatgaaa 240  
 tgcctctctt caaaactctt attatattct tctctactt caactactaa aactatctgc 300  
 gcagaaacta cactctctagc aacagattct gcttcaatgc gtcgaagctc tcaactaact 360

atttcagaag catctccagt agcta

385

<210> 18120  
<211> 424  
<212> DNA  
<213> Glycine max

<400> 18120  
1

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gtttcttcgg aaggaccgca caagtggcca acccaccacc tgggtctctac acatttcaac 120  
tcataaatat cacttttatat attatgatca attaatacgc atcatgaaca tatatggtaa 180  
tcataatacg aagttaaaat aagttaattg attatatata gaagaacgta cgttcttaggt 240  
gaatttgaag tattagctga ttagttatca gagacaatta tataattggg ggtggctgag 300  
agccatataa gcttgcataa aaataaagat taattraaaca cgtaaaagac tttgtttcta 360  
atttatgcta atccaagggc accctccttt atatatcttt aaaatgaactc attgttatat 420  
tact 424

<210> 18121  
<211> 395  
<212> DNA  
<213> Glycine max

<400> 18121

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taccctttct aacatacttc tcagcatgtc ggctaaacat ttgcatgaca caatacatat 120  
ttatttatca tattttaagg atcaatcaat tgagattaag ttgcatgggt atgtcactta 180  
ctcgactctc ttaaacatgg gctgtggtta tggaccaagt accctttcca tcatggcaag 240  
atgtctccaaa ttttcgtgag ttgaaaaca agctccgccc tgtaatatata attcacaat 300  
tatggaatag aatttaagag atggataaat actgttttta tacaggattt gagagagcca 360  
aacataccgt gataactca accaagatac atccc 395

<210> 18122  
<211> 328  
<212> DNA

<113> Glycine max

<123> unsure at all n locations

<400> 18122

aaagcttaag aaatctctct atggacttaa acatgcaccg atgcaatggg atggttagact 60  
tcaagcttct cctcctcctc cctcctcctc cctcctcctc cctcctcctc cctcctcctc  
cctcctcctc cctcctcctc cctcctcctc cctcctcctc cctcctcctc cctcctcctc  
cctcctcctc cctcctcctc cctcctcctc cctcctcctc cctcctcctc cctcctcctc  
gcaataatg ggggggggga ttaatttact ttcttgggtc ctatgtgaag aaaaattgac 300  
cctgaacatt ttcttatcaa acaaagta 328

<110> 18123

<111> 379

<112> DNA

<113> Glycine max

<123> unsure at all n locations

<400> 18123

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gagagcatga aatgaagagc caatgggtga tacatggacg gagatgaaaa agatcatgag 120  
gaagcgatat gtgcgggcta gttactcaag ggacttgaaa ttcaagctcc aaaaacaaac 180  
ccaaggaaaac aaggggggttg aggagtatct caaggaaatg gatgtgctca tgattcaagc 240  
aaagattgaa gaagatgagg aggttaactat ggctcgatct cttaatgggt tgactaatga 300  
taccgngat attgttgagc taccggagtt tgttgaaatg gatgatttgc ttcacaaagc 360  
aattcaagta gagcaacaa 379

<210> 18124

<211> 429

<212> DNA

<213> Glycine max

<123> unsure at all n locations

<400> 18124

agcccaaccat ccttccatag tagatttctg gtaatgtctc taataacatt ggcatttttt 60  
tttccctcat ttgattttaa ctttagcttc caagttctct cactttttaa cctattcttt 120  
ttaaagattc ctgcctctt ttgcacatg ttgttgagtt gaatctctat cgaagccatt 180

atactaacac tgectaacga aggcaaccac taggtccttc caagaatgga ctcggaag 240  
 ttacaagtta gtgtaccang taacaactac cccagtaaga cttctcttga aggaatgtat 300  
 cagcaattcc tcatcttttg cgtatgccc cctcttttga taatacatct ntatagtggt 360

<210> 1-127  
 <211> 385  
 <212> DNA  
 <213> Glycine max

<213> unsure at all n locations  
 <400> 18125

gacataaaa actcagcttc acatcagacc cttcttgtgt ctggactact ttcattggact 60  
 tcatggggcc tatgccagtt gaaagccttg gaggaagag gtatgcctat gttgttgttg 120  
 atgatttctc cagatctacc tgggtcaact ttatcagaga gaaaacagac acctttgaag 180  
 tattcaaga gttgagtcta agacttcaaa ggagaaaaag actgtgtcat caagagaatt 240  
 atgagtgacc atggcagaga gnttgaaaac agcaagttta ctgaattctg cacatctgaa 300  
 ggcatcactc atgagttctc tacagccatc acaccacaac aaaatggcat agttg 355

<210> 18126  
 <211> 398  
 <212> DNA  
 <213> Glycine max

<213> unsure at all n locations  
 <400> 18126

tcaattggag tottgtcttt tacagactta gttggacatc tgttgagtat gtaaacagca 60  
 gtgtagaactg cttcagccca taatgtgtta ggtagtccct tctcttgag catcgatcta 120  
 gccatctcca taactgtgag attctttctc tgggacactc catttttttg aggagaatat 180  
 ggaactgtaa gttgtctctc aacgccttca tcttaacaaa atctttcaaa ctcgtpaaaag 240  
 gtgtactctt tgcgcgcatc acttcataga actttatcc gttttccact ttgattntca 300  
 gcaadggccc tgaacttttt caatactcca tagactctg attctcttt taaaaaatat 360  
 accatctca ttcagagaa gtgtgaaatg aagaatat 398

<210> 18127  
 <211> 347  
 <212> DNA  
 <213> Glycine max

gttaattgggt attgctatgt atttgcattt aataaaattt atttgcattt ttaattaggga 12  
 gtacattttt aaaaggaatc ttgggttatt gggataaaat caaaaataaaa ttttttgatt 180  
 aggaaaagat tgtgatatct taattcaacc ccccttctta agatattga ggccacttgt 240  
 ccaacagaga gtcttttgcg cttagagcac agggcgctt agcgagagac tatgtcacgc 300  
 tcagtgaat aattcaatta gcaatatntt taaaaatgca caacctg 347

<210> 18128  
 <211> 394  
 <212> DNA  
 <213> Glycine max

<400> 18128  
 agctaattat ttatagctgg aggagataag gttgaatgtt tatgaattgt ccaagctgta 60  
 caagcaaaag gtgaaagctt accatgacaa gaagctattg aagaagaatt tccaaccagg 120  
 ccaggaagtc ttacttttca attcaagact caatctattt ccagtcaagt tgaagtccaa 180  
 gtggctctga cctttcacca tcaaagaggt gaagccttat ggagcagtgg agttgatgga 240  
 tcttcaatca aatactccta agagaagttg ggtagtgaac agtcaaaggt taaaactgta 300  
 tcatgggtggc agcattgaaa ggtaaccac catcttgcac ttgcaagacc cctatagggt 360  
 gacatatgtc aagctagtga cggtaaagaa gcgc 394

<210> 18129  
 <211> 396  
 <212> DNA  
 <213> Glycine max

<213> unsure at all 2 locations  
 <400> 18129

gaagtgagc cagcctatga ttgaacggg ccgncacat ccagcctt tccattctgc 60

atggagattt tcaacaacaa catgggcaat gctcccaacc aaaataaaga caatgaaacy 120  
 cgaagatggg gcaaacataa cagagcaaga cctcttgcag ataccaagag gagcctgcac 180  
 catggaaggt ctcagattta tgggtatatg cttcttaatt taattattaa actcttaata 240

<210> 18130  
 <211> 374  
 <212> DNA  
 <213> Glycine max  
 <215> unsure at all n locations  
 <400> 18130

ctctcttnc atctgtactg ncttcattgt attccctttt ctccctctac gattatttc 60  
 tgcacatcc caatgggtgaa agtgtgcgaa attgagtttc gaacaatgta tcaaaatttc 120  
 ggaaaaatcc aacgggttaac gaatccggaa tcatagtttt accgagacag ctttgagttt 180  
 ctgcgaaaaa agaaaaagtc acgatgcgaa caatagttct ctcatctcca acatcttttc 240  
 gtaattecca acggtgagaa tgctcggaat tgagttgtga accattttct taaatntcac 300  
 gacgaaccaa cgatgaatga gtccgagatc gntcattttc tgaaacagat ttgatgggtc 360  
 gcatgataaa gcga 374

<210> 18131  
 <211> 392  
 <212> DNA  
 <213> Glycine max  
 <215> unsure at all n locations  
 <400> 18131

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 aacctaatc ttaattgaa aggtttacca ctactggaaa acctgaatgc aaattttat 120  
 tcaaggctag caatagaaat aggtcttat ataccacta cagttagaaag aaccacaata 180  
 catggaaaca caacaagtgg aagcacaaca atagaaaaac ctagaatag atggctaaa 240  
 caggatadaa caagactata aataattta aaagccaaaa acataattac atctgctctg 300

ngaatggatg aatatttcag ggtttcaaat tgtaagagtg ctaaggaaat gtgggacact 360  
 ttacaagtaa cacatgaacg cacaacagat gt 390

<210> 18133  
 <211> 431  
 <212> DNA  
 <213> Glycine max

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 ctttaattgga catctgttga gtatgtaaac agcagtgtag actgcttcag cccagaatgt 180  
 gtttaagtagt ccccttttct tgagcatcga tctagccatt tccataacta tgcgattctt 240  
 tctctcggat aatccatttt gttgagaaga atatgcgact gtaagttatc tctcaatgcc 300  
 ttcactctca caaaatcttt caaacttgcg agagggtgtac tctttgtcgc gatcacttct 360  
 tagtaactttt a 371

<210> 18133  
 <211> 431  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18133

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 cggaaatattg actatcatac tggagttttt gcaaccaagg taacaacatc ttgtaatttc 120  
 ttagatataat ttttaattggc tactatgaca tgcctacacag tctctatggt tgttgtatag 180  
 atnagcctg caagggatgg aaaaactgtc ttgattgaac ttattgatgc gaaaaccaag 240  
 gagecgaaaag acacgctgga ggtaacttaa tctttttcag aaagctttta gggttatata 300  
 tctttgntat tatcaattgg aaacatttct cccatgagag aaggagaaa attattatgt 360  
 gtgggtagaa cttagaatat ctatacnaag tatattctat tatatcttag aatgtttata 420  
 ctatcttaat g 431

<210> 18134

<111> 390  
 <112> DNA  
 <113> Glycine max  
 <223> unsure at all n locations  
 <400> 18134

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 tccggaccacaa tacccttccg gggtgggaat cttctatct tgcatactct tagacttgaa 241  
 ggcgaatnttg atcttataaat taacgatgca aagtggctat cttctctctc ttttttaaca 300  
 actcttgacc tgacatcatt gcataatctt ggctctctc gttactygga acaaagtgc 360  
 ggtgagctta taacacactt gagagagttg 390

<110> 18135  
 <111> 300  
 <112> DNA  
 <113> Glycine max  
 <400> 18135

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 gacttacagg aaacgcatta tagaccatgt gatgctcaat atcaagcaag ctcccagtct 120  
 ccagacacga aagtctgtga actggaaagc tagttttcaa aaactgttcc aatcgatgcg 180  
 catcgatggt gtatctatag cctccgtctc cgctaaaacc aatcagaacc acgttcactt 240  
 ccagcgggaa ttgaaacgga acctacacga accacagaca catgcattca cacatcaatt 300

<110> 18136  
 <111> 396  
 <112> DNA  
 <113> Glycine max

<223> unsure at all n locations  
 <400> 18136

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 aatcaccatt aaagaacctt attgaagctt aaagatccag cctctctctt acctctctaa 180



gcaagcttcc atcacacct ttgtgcatgt ccttcatgtt ttacatgcct catgacacct 240  
 aaacacactt agtagagaat cttgaatttg atcttggatt agtgggctga accatagctg 300  
 anatttacta atcataatta gtgaaatgtt ggtccacaa attcaagttc aaattcaagt 360  
 caaattttaa taaaaatga aatttccctc caattt

<210> 18136  
 <211> DNA  
 <213> Glycine max

<400> 18137  
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 ttgaggactt gaactagaga tctcaagcct ttattagctg cagaacctt ttcaaggaga 180  
 tcatctctgc aagccatagt aagaacatga cctaaaaactc ggattatgtg ggttttttgc 240  
 cttggagaat gccctatgag caatgcta atctgattaa ttgtggcaga atcagctact 300  
 cggacaagct ttgtgagtgc cattgcagaa gcttctctgc ctcttgggtcc accactctta 360  
 agaagccaca aaaatgcttg gatggctcca gcac 394

<210> 18138  
 <211> 383  
 <212> DNA  
 <213> Glycine max

<400> 18139  
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 gccctttaag tgcagatgtc caaatctttg atgccatatt ctgacttcat cttctcttga 180  
 gaataaacat gtggaggagt aactggtttc ttgagggtgc cataggtaac agttgtctt 240  
 tgatctactg ccttctcatc gaacttcaact cttctcattt gtcaccaagc attctgaact 300  
 tgtcaagttc acattgaatc ctctatcaca cagctgactc atgctgacca agtttgcagt 360  
 cagtcccttc accagcaata ctt 383

<210> 18139

4014 insure at all n locations  
4015 18139

[illegible]

<110>	18140
<111>	336
<112>	DNA
<113>	Glycine max

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<223>      unsure at all n locations
<410>      18140

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tcgatgctat atgatacaca gtgattgac caataatatt cgatgagtcg gaaaatgatg	180
cgcgaattat actgtgccag caggagatgt atcatccccc tgttatcggt gacatcatga	240
ttcacttgaa tgagcatctg gtctgagaaa tcaaagtgtg tggctctgat tatctacggt	300
ggaagtaccc ggcctgaacga tacatgaaga tctcaa	336

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.210>      18141
.211>      343
.212>      DNA
.213>      Glycine max

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400 13141

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tggtctccat gttcaattgt gaacatctcg atataatattg cgcctdaate gggcatctga	120
gtgaaaauu t atgtccatatt agtttagccg gagcttccct ggtccatttc aaacctctcg	180

acatattatt ggctgaatc ggacattoga ggcaaaagtt atggcggggtt aaactttcca 240  
 tgcgcttcca tggtaattt tgagcatctc gatatttat gcacctgaat cggacatctg 300  
 agagaaaagt tatgccatar gag 323

<223> unsure at all n locations  
 <400> 18142

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 gataccatta caagcaagag caggacata tcattgacca tggtaggtaa gctcttaatt 120  
 attgatgaag tccatctact caatgatgat agaggctctg tgatagaggc tctagtttcc 180  
 atgacctac ggcaggtaac gcattatgtct tatttctctc gtgtttttac atgtacaaat 240  
 ttagttagga gattogetta aatttattat attctctttt ggatatatga ataatacagac 300  
 attggcttat gacagctaac ctgatatcta tcttaattgt tccacatata aagcgagctt 360  
 tcttattgat cgattttgag ttggcactt 389

<210> 18143  
 <211> 338  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18143

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 aaataattaa gttttgttag ttattgtac ttttttggtt catttattgt aataaaaaat 180  
 cttaaattact ttaaattaga tcggtttgaa ttaaataata actaattaga taataaaata 240  
 taaaatccaa tcaataacat aagacttgaa taatntttat tgtctaataa cgataataag 300  
 atttcaactt aagatttatt taaattgctc actatatt 338

<210> 18144  
 <211> 343  
 <212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 18144

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gattctgctg ccttcattag aacttcactc tcttatttg tcaccaacaa ttctgacttt 120  
tggtgaagttc cattgaatcc ttcatcacac agctgactga tgc 343

<210> 18145

<211> 417

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 18145

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gagacgctcg aaattgaatg ttgaagctct gagccaatcc agacgacaat aactttttac 120  
tgggatgtct gattgagtc cacaacatat cgagacgctc gaaattgaat gttgaacctc 180  
tgagccaatt caaacgacaa taaagtttta ctccgatata tgattgagtc ccgtaatata 240  
acgagacgct cgaaattgaa tggtgaacct ctgagcaaat tcaaaagaca ataactctnt 300  
actgggatgt ttgattgagt cctgtcatat atcgagacgc tcgaaattga tggtgaaact 360  
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<210> 18146

<211> 388

<212> DNA

<213> Glycine max

<400> 18146

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gaaaactata tctctacac aaaaggtaca cttctctata ttgcaataga ggggttttt 180

cctaaggact gaaagaactt gtctgagatg tccctaagtga aaatctagge tccctactata 240  
 cactaaaata tcatcaaaat aaacaactac aaatctacct atgaaatccc ttaagacatg 300  
 atgcaaaagc ctcataaagg tgccttggtgc attagtgcgc ccaaaaaggca tcaactagcca 360  
 ttcatacaaa ccaaaacttgc tcttcaaaa

<210> 18147  
 <211> 18147  
 <212> Glycine max

<223> unsure at all n locations  
 <400> 18147

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 cctttcttgt ttgtgtatgt tacccttccag attgtctttt ctgttaatca taattttagg 180  
 agtgccagat gttactcttg ttgtattgga ttttatagtt ttttttaac attcattcag 240  
 ttaacgaaga aaaataaatt attttagatt aatttatatg cttaaatata tgtttttatc 300  
 ttttgtttta cattcttatt aatttatgaa taaattaata aatttggatt tgtatctgat 360  
 aatatttttt atttataatt agttgaaatn tanaccaaca ttattatatt atgataaaat 420  
 aaatataaag tctctgattt aat 443

<210> 18148  
 <211> 398  
 <212> DNA  
 <213> Glycine max

<400> 18148

agtttactct gcaaacattt ataatagacc tcttcagtag caaacccaac aacaacagaa 60  
 taattatgac ctttcaagca acagatacaa tccaggttgg agaaatcacc caaatatgag 120  
 atgcaacaagt cctccacaac aacaacagcc tgcctctctt tccagaatg ttgctagtcc 180  
 aagcaagcca tatgttctct ctccaataca gcagcagtca caacaaagac aaaaagcaac 240  
 tgaagctctt cctcaacctt ccttagaaga gtttagtgcg caaatgacca tccagaatat 300  
 ccaattttag caagagacaa aagcctccat tttaggtctc acaaatcaga tggggcagat 360  
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<210> 18149  
 <211> 378  
 <212> DNA  
 <213> Glycine max

tgcataatgt agcaaaagtc ttgatccagt caagtttgat gaggttgaaa atgagggcgc 174  
 aattatactg ngcgagttgg agatgtatct tccccccgct ttttttgaca tcatgattca 240  
 cttgattgtg cattttggtca gagaaattaa atgctgtggg cctgtttatc tacgggtggat 300  
 gtaccgggtt gaggatata tgaagatctt aaaaggggat acaaagaatc tatatcgtaa 360  
 agaagcatct attgttga 378

<210> 18150  
 <211> 380  
 <212> DNA  
 <213> Glycine max

<400> 18150  
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 tatattttta aaaacattta actttatttt cttattttta aatagaaaca tttatcgtt 120  
 tagctttgta aaattcacia ttctaaccct tttatcaa ataaaaaaag ttgattaata 180  
 agaaattaac ttttaagtgt tcaaaattat attattttat taatctacat catagttaat 240  
 attaatatct taaatgttac cctttcagtt tcacataaag atcaaattca ccaattttac 300  
 atgtgagact aaatgtcttt attttaaaat aaaaaaaaaa ttaaaatgat atatttcaaa 360  
 agaaaactaa atatttttat 380

<210> 18151  
 <211> 375  
 <212> DNA  
 <213> Glycine max

<213> unsure at all n locations  
 <400> 18151

agtttnatta tatcgagatg ctcgaaatta aacatcggaa gctctcgaga aattcaattg 60

gtcdataattt atcacacgga tgcctcgatto ggggtgataa tatgtcgaga cgtcgcgaaat 120

tgaacaaggg aggtctctga gaaattcaaa tggctataac ctttcacaca gatgttcgat 180

ccacacacat cgcacataat cgcgcacgaa gacacatgc actccacaaa tgcacaaatgc 240

ccacacacat cgcacataat cgcgcacgaa gacacatgc actccacaaa tgcacaaatgc 300

ccacacacat cgcacataat cgcgcacgaa gacacatgc actccacaaa tgcacaaatgc 360

ccacacacat cgcacataat cgcgcacgaa gacacatgc actccacaaa tgcacaaatgc 420

<210> 18152  
<211> 407  
<212> DNA  
<213> Glycine max

<213> unsure at all n locations  
<400> 18152

gcttcatgag agagtcaaag atcaaathga gaggaaaaat tttagctatg cttaaataatc 60

caacaaaggg agaaagaacg ttgtcttctga acccggaaat tgggtttggg tgcacatgac 120

aaaaganagg ttcccggaac aaaggaaatc aaagcttcaa ccaaggggag atggaccatt 180

tcaagtgcct gaaagaatca atgacaatgc ttacaaagtt gagctgcccg gtgagtataa 240

ttttagttcc accttcaatg tctctgattt atctcttntt gatgcagatg gagaatccga 300

tttgaggaca aatccttctc aagagggaga gaatgatgag gacatgacca agagcaaggg 360

caaggatcca cttgaaggac ttggaggacc tattgatgan gacatga 407

<210> 18153  
<211> 396  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18153

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attaagatgg tcatgacca atccctattt tatgacttaa caaaattgcc taatgaaggg 120

gtaccttttg aggggtgact gattgatgaa tggaaatttg attctctgtt gcatgaccc 180

ccctcgttgg ttgcaccaa ccaagccgat atgacccgaa gacacatgc ctttcacaa 240

gcttttgaga gccgcattctt ccattacctt attgctcgca tcttactccc tagacttca 300  
 aaccttgctt aagttttctga agaagatctc attgtcatgt gggcctttca taaaggctta 360  
 caaattgagt gtgcacacct tgttagatat cgcattg 396

<210> 18154  
 <211> DNA  
 <212> Glycine max

<213> 18154  
 <400> 18154

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 tcaatgcttt tactgattga ggtagaggcc actcctgaat agcgtataac ttttctggca 180  
 ctggttcaac tccgttgccg gagacgacat gccccaggta ctccagtggg gaetgggcaa 240  
 aagtgcattt ggtacgtttc aaagagaact tccctganag caagagtctg aacgcgcctt 300  
 cgaggtgacc canatgatcc gccatttggt tgctatatac cagcacatca ccgaagatga 360  
 cgatgatgaa cctgcgcaga aagggttgaa agagctgatt catagttgct ttgaaggtag 420  
 atgggtcgtt acac 434

<210> 18155  
 <211> 361  
 <212> DNA  
 <213> Glycine max

<400> 18155

agcttttgga gtttggggaa gaatgcctta ctaaaatata caatgagggtg ggaattttgc 60  
 atcaaaaatag ctcccatggt tgtgccagaa gcacagatt ccaagacaaa tgggatgggtg 120  
 aaatctgata tccctaagac aaatgggaat ttgcatcaa aatagctccc atggttctgc 180  
 ttccgcatt agtgacttga gtttgcataa gttgacctga gaggtaggat tccaaaggaa 240  
 ttgactctct ccgaagagca ctatcaatgg tgcggctacg gtggcgtaac ctogaacaaa 300  
 ctctctgtaa aaacctgtaa ggcacaaaaa tcttttcaac taigatagag atuatggaga 360  
 361



<210> 18156  
 <211> 429  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18156

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 aaaaaatata ttccatttgg ttaaataact tttagagaac ttatccttag gatttgggga 240  
 aatcatacca ccaagcaata gccaaaagat acactggaga gacatcaatc agattaaatt 300  
 catttgcaca attacatcaa tcagctgata gcttctctag aaaacttata atttcataat 360  
 aataacaaca aactatgaaa atactctgca taatntttac aaaatcaatt cattattaaa 420  
 aaaaaatata 429

<210> 18157  
 <211> 416  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18157

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 ggctatcgca tcaaagattt ggccacttca acacacatgc cttgaagttg ttacatgaga 120  
 agaacatgat gagagatctt caaagcataa aggagaacat tgaagtgtgt gaaggatgtc 180  
 tcttagtaa gcaacacoga ttctctttct caacaagcgg agcatggaga gcgaaagatc 240  
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 acagataact cataactctt atcgatgaat tctcttgaat gacatgggta tatcttctaa 360  
 aagaaaaata agaagtcttt ggagtattca aaatttcagg gccttgcgtga aatcaa 416

<210> 18158  
 <211> 435  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations

<400> 18158

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aatggagagg gtaccacta ctggaaaacc cgaatgcata tttttatcga ggcaatagat 120  
ctaaatatc attaagccat aaaaataagg cctatatatc ccaccacagt agaaagagtc 180  
tggcgttctc tggcgttctc tggcgttctc tggcgttctc tggcgttctc tggcgttctc 240  
tggcgttctc tggcgttctc tggcgttctc tggcgttctc tggcgttctc tggcgttctc 300  
ggcctagaaa tggatgaata tttcagagtt tcaaatgta agagtctta ttttaattgg 360  
gacactcttc gattaacaca tgaaggaact acagatgta aaagatctag gataaatgca 420  
ctaactcatg agtat 435

<210> 18159

<211> 354

<212> DNA

<213> Glycine max

<400> 18159

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gaaaagcaca tcgtttggaa tgatttcgta aatctcagaa aactattggg aaatgctgat 180  
gaaaacacga atgtcaagca gatatatatt tgaatgagga atgtagaggg ccgtgtgaag 240  
caacggtcga attttccttg gttcagtagt gaacgtgcta ttaatgctaa gtgattcgtt 300  
tgggcacggt catattgctc gaattgctat aattcctcta tcacacaaat gcc 354

<210> 18160

<211> 412

<212> DNA

<213> Glycine max

<220> unsure at all n locations

<400> 18160

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tgcctttcct taccatcctt atcaccacac caatctuaat caataaacc aataactct 180  
ctctctatat tctcttgact gtaagatctt aaaaatccaa tat caatct tctctcaca 240

taccttagaa tctcttttgc tgetaggaag tgaggtgtct ttggtttctc cataaactg 300  
 ctatcaacc caacacaata agcaatgtca agcctgggtg tacatatgta cctcagtgag 360  
 cctanaactt gcttgtaaaa ggtangatca acttcttctt cctctcctc ta 412

<210> 18161  
 <211> Glycine max

<210> 18161  
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 atgtattacg tgactcaatc gaacatccga gtaaaatggt attgcagttt gcatttgcaa 180  
 caagctctcg atttcaattt ggatcgtctc garctatgat gggac'caat cggadatccg 240  
 agttaaaagt tctpgcgggt tgcatttgcg acgagcttcc gctttcaact acgagcgtct 300  
 tgatatatta ctggactcaa tccaacatca gaataaaaag ttattgttgt tagaattttt 360  
 ttcagagcct ctgttttcca 380

<210> 18162  
 <211> 390  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 18162

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 ttt'gatgca gatggagaat tggatttgag gacaaatcct tctcaagagg gagagaatga 180  
 tgangacatg tccaagagca agggcaagga tccacttgaa ggacttggag gacctatgac 240  
 ahg'uctaga gcaagyaag ccaagyaag tctccaacaa g'gctgtcca tactatttga 300  
 atacaagccc aagtttcaag gaaanagtc caaggttctg agttgtatca tggccanac 360  
 gpaadaggaac taaatgacac cactt'gct 390

<210> 18163

<211> 394  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18163

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 agtaaaaagt tattgttgtt tgaattggct cagagcttcc acattcaatt ttgagcgtct 300  
 caatatatta cgggcctcaa tcagacatcc gagtaaaaag ttattgtcgt ttgaattggc 360  
 tcagagcttc acattcaat ttgagcgtc tcga 394

<210> 18164  
 <211> 414  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18164

ntgagcaaat tcaggcgaca atatcttttt actcgcattt ctgattgttt cccgacatat 60  
 aacgagacgc tcgaaattga atgtcgaagc tctgagccaa ttcaggcgac aatatctttt 120  
 tactcggatg tctgattgag gcccgtaata tatcgagacg ctcgaaattg aatgttgaag 180  
 ctctgagcca attcaaacga caataacttt ttactcggat gtctgattga atctgtcgt 240  
 atategagac gctcgaaatt gaatgttgaa cctctgagcg aattcaaacg acaataact 300  
 tgtactcaga tgtctgatat gggctcgtaa tatatcgaga cgtcgaaat tgaatgttga 360  
 agctctgagc gaattcaaac gacgataact tgtaactcgg atgtctgatt gagt 414

<210> 18165  
 <211> 301  
 <212> DNA  
 <213> Glycine max

<400> 18165  
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<212> DNA  
<213> Glycine max

<400> 18168

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cctcttcttctt cctcttcttctt cctcttcttctt cctcttcttctt cctcttcttctt  
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acatttaaat atcattaaaa taaaaaacta caaatctacc tatgaaatcc cttaagacat 120  
gatgcataag cctcacaag gtgcttggtg cattagtgag cccaaaaggc atcactagca 160  
attcatacaa accaaacttg gtcttgaaag cagttatcca ttcate 406

<210> 18169  
<211> 422  
<212> DNA  
<213> Glycine max

<400> 18169

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tgcttctggt gttgttggtg tagctggatt ggtggaggaa catctggtct gcttgggcca 130  
gcagcattat gaaaataagg ctattgttct tctgtctgtt gtgaaggact caaccatcta 240  
aggttgggat gattctctca cccgggattg tacttgtcgt tggagaggct ataattgttc 300  
tctgttggtt gattctgctg ctgaggttga ggaggtctat tctagatgtt tgcagcataa 360  
gcttttaggt gttcaattgc tccagattgc tgcacaaaag ggcaaaggct tctatgggtg 420  
tc 422

<210> 18170  
<211> 267  
<212> DNA  
<213> Glycine max

<400> 18170

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ctgtcaagct tgacgagttg gaaaaagacg ccgggattat attgtgccag acggagatgt 180  
 atttcccccc cgttttctat gacatcatga ttcaattgat tgtgcattctg gtcagagaaa 240  
 tcaaatgata ctgcctgttc atctatt 267

<210> Glycine max

<400> 18171

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 tcataagttg aatagttaag ggtaggacca cttaactttt cactaaaata agcaattgga 180  
 tgcctctctt gcatcaacac agcccacatc ccaacatttg aagcatcaca ctgaatttca 240  
 aatatttttt gaaagtttgg caacgcaagt atggggcatt agttagcttt tgccttaagaa 300  
 cattgaaagc ttctcttctg ttctctcccc atttgaaacc agcatttttc ttgagcactt 360  
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<210> 18172

<211> 417

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 18172

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 tgtctgattg agtcccgtaa tatatcgaga cgtcggaaat tgaatgttga agctctcagc 180  
 aaattcaaac gataataaat ttttactcgg atgtctgatt aagtcccgta atacatcgag 240  
 acgctcgaaa ttgaatgttg aagctctcag caaattcaaa cgacaataat ttttttagtc 300  
 agatctctga ttgagaccgg taatatatcg agaccatcda aattgaattc taaagctctg 360  
 aactaattca aacacataaa aggttttgtt ccaagctctg attgaattct gaaatct 417

<210> 18173

<40> 19173

dagat at ulap; caaaaaayre tngaaya' ay acaga'taan ugayitong a' na' gata - 4

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tgtrayaaa: aattcataaa tgtaattacg ggtaaatgaa aatratggatt ggtaagtaca 360

tataaataag tactcttata tngtaagaat agagtgt

<210>	18174
<211>	425
<212>	DNA
<213>	Glycine max

<400> 18174

gcaacatcag accacttcca ggggtctgga actacttttt tggatttggt ggggectatg 60

caagttgaaa gccttggagg aaagaggtat gcctatgttg ttgtggatga tttctccaga 120

tttacctgag taaactttat cagagagaaa tcagaaacct ttgaagtatt caaagagttg 180

agtctaagac ttcaaagaga gaaagactgt gtcatcaaga gaatcaggag tgaccatggc 240

agagaatttg aaaacagcag gttcactgaa ttctgcacat ctgaaggcat cactcatgag 300

ttctctgcag ccattacacc tcaacagaat gggatagttg agaggaaaaa caggaccttg 360

caagaggetg ctggggctcat gcttcctgcc aaagaacttc cctataatct ctgggctgaa 420

425

4210	18125
4211	448
4212	DNA
4213	Glycine max

2003, measure at all 10 locations  
2004, 2005

\* a b c d e f g h i j k l m n o p q r s t u v w x y z \*



gttactgttc ctttcccgcg ctgaagatcc tgcggaagaa ttacttgggg tctgaagagt 120  
 gtgagattga ggagtcacatt ttgaagcggc tggaggaggt tgcgacgtg gcccggatga 180  
 ctccggcgga tataagcgag gttttgatca agaacagacg caagagagag aatgcgggtg 240  
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 agacaagttag tataatagga cgaatgat 448

<210> 18176  
 <211> 402  
 <212> DNA  
 <213> Glycine max  
 <220> unsure at all n locations  
 <400> 18176

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 ctttctcttc ttctaatttc acctttaatc ccaacggttg ttcgatgtac acttcttcca 180  
 cgaggactcc attcacgaag gtagacttca cgtccatttg atgaattctc cactagtgtt 240  
 gagttgcaag agagattatt actacgatgg tctccaggcg agcgaccaga gcaaacacct 300  
 caacataatt gataattgtg aaatttgagt taatttgata gtcaattatg gctaagaatg 360  
 attggaattt ctttacttta tgcgtttattt aataaaataa ta 402

<210> 18177  
 <211> 437  
 <212> DNA  
 <213> Glycine max  
 <220> unsure at all n locations  
 <400> 18177

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 gtaggtaga ggcctaatad caggaatctc tctaaaagtc catccaaagg ccttcttctg 180  
 ctttctgacc accggcaaca accttctctc ttcttcaata tcaagguaag cagagatgat 240

cactggaaat ttgatgcaat cctaccccgc aagggcattg gatagaagac tocaagtaga 300

ttggggccaga gatccaaggg aaggccctag ggttctcatg agccttaagg tagatttga 360

ggccatgggc taagtatgag cccgcttacc ttgttaatta ttagaatagg ttttttctt 420

tttttgggtttt

<210> 120  
<211> DNA  
<213> Glycine max

<400> 18178

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agtgcctta aatacaaggg ctaaaaaatc ctacattact aagggtacct tctacacta 120

tggagcacta aatacaagac cctaaaaataa tgaaattcta atctaatatg tacaagata 180

agtgggctca tacttagccc atgggcccac aatctacct aaggctcatg agaaccctat 240

ggccttctct tgcctctctg gcacaatctt cttggagtct tctatccaat gcccttgggg 300

ggataggatt gcctcactag gggaaatctc aaatcaaaaa gtgtcatgct tactatctat 360

caaagaaatc atatggtatg gcatacaaat ct 392

<210> 18179  
<211> 384  
<212> DNA  
<213> Glycine max

<400> 18179

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ctatacgaga catcttgcca aacaaagtca ggtagcgat aactcgctg tgtttttct 120

tccatgctat atgtagcaca gtcattgac cagtcatgtt tgatgagtg gaaaatgagg 180

ggcaattat attgtgcccac ttggagatgt attttccccc tgccttcttt gagataatga 240

ttcacttgat tgtgcctctg gtcagagaaaa tcaaatgttg tggctctgtt tatctacgg 300

gcatctaccc ggttgagcga tacatgaaga tcttaaaagg gtatctctgc cagaagcacc 360

tattgtgac aggtatattg caga 384

<210> 18180  
 <211> 373  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18180

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 agacattagt atggacttg tcttggggt tctagaacc caaagaggcg tagactctat 300  
 ctttgggtg gtggataggt ttagcaagat ggcacacttt atatccatgc cacaggcgga 360  
 tgatgcttcc cacatctc 378

<210> 18181  
 <211> 395  
 <212> DNA  
 <213> Glycine max

<400> 18181  
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 ttttgatgca gatggagaat ccgatttgag gacaaatcct tctcaagagg gagagaatga 180  
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 aagggcaaga gcaaggaaag ccaaggaagc tcttcaacaa gtgctggcca tactatttga 300  
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<210> 18182  
 <211> 346  
 <212> DNA  
 <213> Glycine max

<400> 18182  
 cttctcaga taaactacc agatccagac atccgagat taaactcga taaactcga 60

tacaccagag ctccattg ccaatttggg gagactagat gagttatgta cgcgaatctg 120  
 acatccgggt gaaaagacag gaccattggg ctttcacgag agcttgccgat gttcaagggc 180  
 gagcgtctag atgagtcctg caccggaact gggcatttct ggyaaaagcc atgaccatto 240  
 agcctatcg acagctggg tggggcaaac aggaacatct ctatctatta tggcccaag 300

<210> 18183  
 <211> 410  
 <212> DNA  
 <213> Glycine max

<400> 18183  
 tgaaagaatg cagacaatct ggggttgtct gtagagaatt accttgttgc tatgagatta 60  
 cctctctat gctcttcta tgtttataaa tgaatcaagc agcctcaaga tgtcaagaag 120  
 taaatgtggt tgaactgagaa ttacataaac aggttgggct tggttgcctt gtatgttgtt 180  
 ttgagcttcc tagttggggg cctaacttcc ttgaacacca aagggaaact gatcttggag 240  
 ttgaggaaact gcttgggtgct ctcccttttg caaagtttag ctgggatggt ggcagttttg 300  
 atgatctgga tgcattggaga cctgactcta tgacgagatg ccatttcggt gtacatgtgt 360  
 tcaacagcgc cgttttaggt agtatcgca tattccttgt acatgttgtg ataaccagtt 420  
 423  
 cgg

<210> 18184  
 <211> 410  
 <212> DNA  
 <213> Glycine max

<400> 18184  
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 actctgcat cataccgaga cttacgaagc ccaacaggtt tagccttctc taagtattct 180  
 gaacaaaatt caatggcttc ttctgcaatg tacctctcaa caataaatgc ttctagacga 240  
 tatatattct ttctatacc ttctaaagat ttcatgtatc gctcaaccgg gtacatccac 300  
 cttagataaa caagaccaca acatttgat ttcttgacca ggtgcacat caatgaatc 360

atgatgtcaa agaaagcaag gggaaaatac atcttcaact ggcacagtat

410

<210> 18185  
<211> 386  
<212> DNA  
<213> Glycine max

cttttagat gtttttttaa tttattttta ttttttttaa ttttttttaa ttttttttaa  
cttttagat actttgtgtt ttaacgactt gaattcaata tgattttgtt tatcaattat 120  
ttttggattt gtacattact tatacgaaat tttataagtt ttttttttaa gttagtattt 180  
caataggttt taaaataatt aattaatcaa agacgtcttt aagcaagctt ttaaatatgc 240  
tcttggggcca agccagactt ttatgtaagc cgagccgagt ctttaaaaaa agcctatgat 300  
aggtaatgag ccaagctcaa gctttacgta ttcaactcaa gctgagctca dgcttagtaa 360  
agcttgggtt ggtttgctca tttcac 386

<210> 18186  
<211> 388  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18186

agctttgtgca ctcaatatcc tgatgagagt gttccatatt ttctcaagac tgaactaata 60  
catttgctgc ccaagattca tggctcttgc ggtgaagatc ctcataagca tcttaaggag 120  
ttccatattg ttgtttccac catgaagccc cctgatgtcc aagaagatca tatctttctt 180  
aaagggtttt cctcattctc tggagggagt ggcaaaagat tggctctact accttgctcc 240  
cagatccatt ttcagttggg atgaccttaa gaggggtgtc ttggagaaat tcttccctgc 300  
atctatgacc actaccatca ganaagacat ttcatgcctc angcaactta gtggagaaag 360  
cttgatgag tactgggaaa gattcaag 388

<210> 18187  
<211> 381  
<212> DNA  
<213> Glycine max

<400> 18187

tctagcttat aatattttat tacgctcgaa attaaacaac ggaaactctc gcgaagttca 60  
aatagtcgta actatttcaca cggatgtgcg gtccgggccc ttaatatgtc cagaggctcg 120  
aaattgaca agggagctc ttgaagaaat caacruagar aactttcac acaatctcgc 180  
tattccacaa catagataac taaagaaat gtttcaatt taaaggagc tggattaac 240  
ttatatatat gatagctcg a 381

<210> 18188

<211> 422

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 18188

tctaaactnt gtacaagaat gaagctctga taccacttgt tagacttgtg gcctcagata 60  
tettaagaag ggggggttga attaagatat tccaaacttt tctcctaatt aaaaatctat 120  
cttacttttt acttaagtta tgaattccct taatgacaat cttctttaaatt attaattcaa 180  
atgaagcaac ttgaattatg aatataaagc aataataaat aaaggagatt aagggaagag 240  
aaaatgcaaa ctacgtttta tactggttcg gccacacct tgtgcttacg tccagtcctc 300  
aagcaaccgc cttgagagtt ccactaactt gtaaattcct ttacaagtt ctaaacacac 360  
aaggacaacc cttcctttgt gttagagatt tttaaacaag agactcacag ctcttatccc 420  
tt 422

<210> 18189

<211> 358

<212> DNA

<213> Glycine max

<400> 18189

tagaacaatg gaagctgtcg agaaattcaa tctgtctatc ttctttaacg gatgttagac 60  
tggacacat aatatatga gaggaaataa attgaacgat tgaactctct caagaaattc 120  
aattggcat aacgtttcac agggagctc gatccgggag caaatatat cgtgaagctc 180

gaaattgaac aatggaacct cttgagatat ttaaattggtc ataactgttc acacgaatgt 240  
 ccgattccag gaacttaatat atcgagacgt tcgaaattca agaaccggaag ctttcgtgaa 300  
 attcatatgg aaataaactt tccatggat gatctagtc cgcgacat atattgtg 358

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<223> unsure at all 11 locations  
 <400> 18190

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 gcagnacttc ttggacctga aatgctacaa cagattaacg aacaagtga gttgattcga 120  
 gagaagataa aagcatctca ggataggcag aagagctatt atgatagaag gagaaagcca 180  
 ctgattttc aggaaggaga acatgtgttt ttgaagggtt ctcccgtaac cagagtcgga 240  
 agagctctca aggttaggaa gttgacaccc aagtatctag gcccgatca gattttgaag 300  
 aagattgggc ttgtagctta tcatatcgcc ttacctcga gtttatcgaa tttgcactct 360  
 gtgtttcatg tctctcaact gaggcggtac aaccagatc catcacatat acttacagtg 420  
 gacgccac 428

<210> 18191  
 <211> 371  
 <212> DNA  
 <213> Glycine max

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 tagtcacca attgggcta ccaacacaaa ccacaccttc tctcaacgtc atgggtggga 180  
 acgggcata cctggattgt cgcctgtct gtccagcact tgcagttcat attcaggaca 240  
 ttgcttcaa tattgacct caatgctctg tctgtgttg tactcacatc gatttaagt 300  
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 tctctccaa 371

<210> 18192  
 <211> 325  
 <212> DNA  
 <213> Glycine max

<400> 18193

ttctgatata ttacaggact gaaccggaca tccgtgtata aatttatttg catttcatt 15  
 ttctcagagc ttctgatata aattttgagc atctcgatat attacgggac tcaatcagac 240  
 atctcgagtc aaagttattg tccgttgaat ttgatacagc cttacgcatt caatatggag 300  
 cgtctctcga taaattatga cactc 325

<210> 18193  
 <211> 403  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18193

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 cttactatga cattgggtgca atggattttt atggtcatat aaaaaacata acaaagatca 120  
 agaaaggaaa tccaaaaaac atgtagaaac tagcttgagc cgcctttggt caaagctgta 180  
 gaaaatgcag aaactatggt gctcatcct tctgggtggat tactagtggag cctaaactag 240  
 aaaagctggc ctcatatgat gtttccataa tatgtcttgt aattttggct ttgtttatct 300  
 ttagtctctg ttgtgtttta tgaagaaata ttatgcatga ataacttcta ggatggatat 360  
 tttatggatt gcaccaatgt taagcttttt gtttctacta ttc 403

<210> 18194  
 <211> 416  
 <212> DNA  
 <213> Glycine max

<400> 18194

ttctagctta acacgaaa ttagttaggc tacttgggtt ctgtttttta ggaatattta 60  
 ttgtgtgtgc tatgaatgc ttctcattaa aacccctgat tgcctcatat ttgttaattt 120



tgaatatctg cgaaattaga ttgttagtat atgtctatta atttagtttt ggttcaagac 180  
 acaccgagta ctaatatctg ttttaacattc atatggttgt ggtgtgtatg tatagatcca 240  
 ataaagaaaa cacaattgaa ttggcaaagg cggtaaaaaa tcaatgaagg tattgctcga 300

<210> 18195  
 <211> 406  
 <212> DNA  
 <213> Glycine max

<400> 18195  
 tcaagaaaaa gatggcctta tcaaactcct tattcctttt ggaattctat caatagacct 60  
 ccaatcttta atggagaggg ttaccattac tggaaaaccc gaatgcaaat ttttattgag 120  
 gcaatagacc taaatatttg ggaagccata gaaatagggc cttatatacc caccacagta 180  
 gaaagaatta caatagatgg cagttcatca agtgaaagta taactataga aaaacctaca 240  
 gatagatggt ctgaagagga tagaacacga gtacaatata attttaaagc caaaaacata 300  
 ataacatctg ccttgccaat ggatgaatat ttcattggatt caaattgtaa gattgctaac 360  
 gatatgtgtg acactcttcg gttaacacat gaaggaaaact acaatg 406

<210> 18196  
 <211> 396  
 <212> DNA  
 <213> Glycine max

<400> 18196  
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 tacaattcat cctacatata aaatattatc accttgggtt ttgctttcag gttactctcc 180  
 tccacttctt tagcatgaat cttttctctc agcttagtgt agaactggcc accaaaataa 240  
 aaattttta aaactgagtt tatccaaaag aaacctctat gtaacacaaa agccagaagg 300  
 aagtaataat tattacctc tttctctctc tcaagcggct taactacttt gaaactgaa 360

<210>	18197
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<212>	714
<213>	117

tttggattga gttctgtctg gagagaagag gaagttgcaa ctgttggagc tccaagagat	141
gagggcttaat gcttatgaca ccatgtttgta caaggggatt gtgaaggcct atcatgacat	180
gaagtttggtg cgaaagaact tccaatcagg ccagcaagtc ttgctcttta attcatgact	240
caagctatatt ccaggtcacc tgatgtcctt atgggctaga cctcttacta tctaagaggt	300
atagccctat ggagcagtgg aattgatgca tcttcagtta catcatctaa agadaacttg	360
gggtgtgaat ggtcacagat tgaaactgta tca	393

<210>	18198
<211>	392
<212>	DNA
<213>	Glycine max

<400> 18193

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ttacaatgca tgtggcagtt ggttgattac atgggttttta tttttcagga acgtgcggct	180
ggcgcattgg ctaatttggc agctgatgac aagtgtagta cagaggttgc actatcagga	240
gggtgtacatg ctctagtgat gcttgcctgt aactgcaaat ttgagggagt gcaagagcaa	300
ctagcattac ttttactat ttgggtacca tccagttcag ttgctaaaat ctttgaagct	360
gttttatttg gttagatgata cctgcacaatt ga	392

<210>	18199
<211>	404
<212>	DNA
<213>	Glycine max

43 2004

agctttttca aattcaaacg acaataacctt ttgactcgga tgcgggattg agtcacgtaa 60  
 tatctcgaga cactcggaat tgaataccga agttatgagc aaattcaatc gacaataaat 120  
 ttttactcgg atgtcggatt gagtcacgta atatatcgag acgctcgaaa ttgaataacg 180  
 attttcaatgaa ttgactcgga ttgactcgga ttgactcgga ttgactcgga ttgactcgga 240  
 attttcaatgaa ttgactcgga ttgactcgga ttgactcgga ttgactcgga ttgactcgga 300  
 cgaagctctg agcaaatca aacgacaata cctattgact cgga 404

<210> 18200  
 <211> 392  
 <212> DNA  
 <213> Glycine max

<400> 18200  
 agctttgcct caaaacaaag tctttccaag acatccaagg ctgtggtaat cgattaccaa 60  
 gcagtgtaat cgattaccag aagacaatat tgaaaaaaca acttttaaga agggttttga 120  
 aatttgaatt taaaagttgt aatcgattac cattgatgtg taatcgatta ccaacaacga 180  
 aactcttgaa attcaatttg aaaagtcata acccttcaaa atataactgt gtaatcaatt 240  
 accagaaacc tataatcgat taccagtga gaattttaga aaaagctttt tgaaaagaca 300  
 catctcttca aaccattttg aaaaggcagc aatgcccaat atatatgtgt gtctgacttc 360  
 agaaggcaag agagagatat tctaagcgaa ct 392

<210> 18201  
 <211> 390  
 <212> DNA  
 <213> Glycine max

<400> 18201  
 tctatctttg ttgactaagg ccaaaaactt ctctgggaatt tctatctttg gacttgggtg 60  
 attcaatcct ctttaggaag gaccactca ctatagccat gagcaagagg ctccaagagg 120  
 atggggttag agtctgtgaa gaagacctta ttgtctcat gaacctcagg gttagattct 180  
 gajcccatgg gcccaaggctg ggtccaatca tcttctgaca tattagacta ggaatgatt 240  
 atatttggc ctgtgattca ggtctccata atgtatgtag ggtacctag aaataacga 300

tttttcagcc ctgttatctt agggcaccta cactagtttt tatattaagc gtagctgtgt 360  
aatttcacat gcactaagtg aatatttgat 390

<210> 18203  
<211> 18203

<212> unsure at all n locations  
<213> 18203

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catatcgaga cgtctgacat tgaacgttga agctctgagc caatacaaac gaccataact 120  
ttttctcag atgtctgatt gagtcccgta acataticgag acgctcgaaa ttgaatgttg 180  
aa'ctctgag aaaattcaaa cgacattaaa ttttactcg aatgtctgat tgagccccgt 240  
aaratatcga gacactcgaa attgaatgtt gaacctctgt gcaaathcaa acgacaataa 300  
ctttttctct ggatgtctga ttgagtcccg taacatatcg agacgtctga aattgaacgt 360  
tgaagctctg agccaatata aacgaccata actttntact cgga 404

<210> 18203  
<211> 399  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18203

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tgaatctagt ggagttggca ttggggctgt ttgatacaa aacaaaaggc ctatagctta 120  
tttctcggag aaattgggag gagccagatt gaactattgc acctatgaca aagagttcta 180  
tgccattgtg agagctcttg atcattggaa tcattatttg cyttcnaatc actttatatt 240  
gcattcagat catgagtcac tgaagtatat caatgggcag cagaagtiga gtccaaggca 300  
tgcataaatgg gttgaatttc ttaattctt taattctctt tcaaaatata aggatggtaa 360  
gaataa'ctg ctggtctgat cactctcaag gaggtatgc 399

<210> 18204  
<211> 399

<212> DNA  
<213> Glycine max

<400> 18204

agcttacttt ataaagttct ctaaaagtga ctgaggaact tgggtgctca ataaaaaca 60

ctgaggaact tgggtgctca ataaaaaca ataaagttct ctaaaagtga ctgaggaact tgggtgctca ataaaaaca

ctgaggaact tgggtgctca ataaaaaca ataaagttct ctaaaagtga ctgaggaact tgggtgctca ataaaaaca 120

gacaaatcta tccaaggaca atcaggaata ggcaaggag aataaagtc atgatgctg 3

atgttagact tagagttctt acaacaatg aaattctca aattttttt tacatcatgt 360

ttcatatgaa gccaaaagaa atgtcatgc agc 393

<210> 18205  
<211> 393  
<212> DNA  
<213> Glycine max

<400> 18205

agcttggtat ctcaacctat cacataatat tcttgaagg gagctgaact tgactggatt 60

gataggcttg cgcacattag acttgctaaa taacagattt tatggggata ttgggttgaa 120

tttcccttcc atttgtgcca atttagtctg tgcgaatgtc tcaggtaata aattgactgg 180

tgtgattgaa aactgctttg atcaatgtct caagttgcag tacttggtt tgagcaccaa 240

caatctgagt ggaagcatat gcatgaagtt ttcgaggctc aaagagtttt ctgttgcgga 300

gaaccatcta aatgggacta ttcttttgga agcttttctt ttgaattgta gccttcaaga 360

actagacctt tcacaaaatg gatttgctgg tga 393

<210> 18206  
<211> 392  
<212> DNA  
<213> Glycine max

<400> 18206

ttcttattt actctgaaa caagctgtg atgatgcat gggagaatcc gttgatccag 60

actcagcta aadccgttg ttccgttgtt ggcacgtac caatattga gtttgtatg 120

gggttcagga atccgtcat tcaacgata acacttgtt caacacaaat tgttaagct 180

catcctgagg tttatgaacg catgcttcgc tccggttggg gccacaatga aaatgtcaag 240  
 attgattttg gaagatggca agatgttctg cctgagcttg aaacatatga tggtaattgc 300  
 tattcgtcta atcttttact tcataaacgt caatgcttga ttgcattcatt acacatacta 360  
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<211> 18207  
 <212> DNA  
 <213> Glycine max

<400> 18207  
 ctatctgtga ttgggagcgg tataaggctc gtcttgttgt caatggcagg tcttaatagg 60  
 tgggtatcga ctatgacgag actttcagtc cagtggtaaa accagctact atttgtgtgg 120  
 tactaagcat tgtcgtgtca aagaattgga ccattcatca acttaattga aagaatgctt 180  
 ttctctatag gcacctttct gaaaccgtct acatgcacca gccctcctgga tttcgtgac 240  
 gaaatcatcc ggatcatgtc tgtcttctaa agaaatccct atatggcctt aaacaagccc 300  
 caagagcatg gtaccaacgg tttgcattct ttctctccac catcggattt gttaatatga 360  
 agaccgacca ctctctgttt atctatactc atg 393

<210> 18208  
 <211> 388  
 <212> DNA  
 <213> Glycine max

<400> 18208  
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 caaagatact tgcattgtct atatgaacga ggtttcatct tatgaattgc atgccaagct 180  
 ttggccacgt acagtgtgaa ataacattct gtattctgtc ctcaagtata taacaaguct 240  
 acataatgtg aacacctctg aagcatttga gactaactct tatagaaaa aaaaaatggc 300  
 tgaatcacgt ggaagagatg cagtgaagac atgggtgata ttgataaca agtgtggctg 360  
 gagaattaca tgcactgggtg gattcact 393

<400> 18209

<210>	18210
<211>	391
<212>	DNA
<213>	Glycine max

<400> 13210

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<210>      18211
<211>      400
<212>      DNA
<213>      Glycine max
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1909

152

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 ctcacctaac cactacccgt gcgatctcta cctaagagcc actcttagat atgagaacct 360

<210> 18212  
 <211> DNA  
 <212> Glycine max  
 <400> 18212

agcttttttag taaattcaaa tggtcataag ttttcacacg aatgtttagat tcyggggacat 60  
 aacttatcta gacgcttgaa attgaacaac ggaagctctc gagaaattcg aatgttcata 120  
 agttttcaca cggatgtccg attcggggac ataatatatc gagatgctcg aaattgaaca 180  
 acggaagctc tocgagaaatt cgaatgggtca ccacatttca ctcggatgcc cgattcggga 240  
 acataatata tocgagacgt cgaaattgaa caacggaagc tctcgagaaa ttogaatggt 300  
 cataagtttt cactogaatg ttcgattcgg tgacataact catctagacg ctcgaaattg 360  
 aacaacagaa gctctcgaga aattogaatg gtcatac 397

<210> 18213  
 <211> 388  
 <212> DNA  
 <213> Glycine max  
 <400> 18213

tgctttctct toaatgaaac cgtttaaaaa ggcactctta acatctttt gaaaaagctt 60  
 aatgtttttg tgagcaacaa aggctaaaat gattcttata acttcaagtc tagcaacatg 120  
 aacaaaaggtt tocgagaaat ctataaactt ttgttgatta tctctcaag ctactaacct 180  
 agctttgttg cataactactt ttcttgttc atccaacttg tttctgaaga tctatctgt 240  
 tccaatgggtg ctcttagttt cggcatttg aacaaatgtc cagacatcat ttttgttaaa 300  
 ttgatccagt tttctctcca tggagattat ttatctaatc tctatcaaaag ctttgtctat 360  
 aagtttadct ttgatctcaa acacatgg 398



<210> 18214  
 <211> 393  
 <212> DNA  
 <213> Glycine max

<400> 18214

gctgcttctc agtctctctc tttcttgggc tataaggttc aaaatcttgc ttggaacagc 241  
 aaaggggctt gctcatttgc accactcttt cegtccaccg atcatccact acaacatata 300  
 gccaagtaac attttgcttg acgaaaatta caacyccaag atctcagatt ttgggttggc 360  
 tgggtctctg acaaagctgg accggcatgt gat 393

<210> 18215  
 <211> 386  
 <212> DNA  
 <213> Glycine max

<400> 18215

tagcttggac aacaaaattt gacaactaat agaattatat aaataagaaa taaaaatgta 60  
 ggataaaatc aaatttatat tctttactta tattcttctt cctatttatt tatgctaaat 120  
 tgcattgaaa gtgaaatata tacaatatta taattataat aagaattcag aaaatataat 180  
 ttggtggagt aaaactgtag agtatttaat tttaaataat aaatttatta atgcacaaaa 240  
 aagaaaaaca tgttggcttt taacaattgt gcaactcttt ttatgttagg ttataattg 300  
 taatttttag agcacaatct taattatgat ttataaatat ttctggaata ttaatatcca 360  
 qggatatcaa aaagaaagat atgttc 386

<210> 18216  
 <211> 361  
 <212> DNA  
 <213> Glycine max

<400> 18216

agctgacaa ggaattattt gtgggttgg aggttgaatt ctgggttgc ctgctcggga 60  
 gaggatgta cagaggggta accagagct gaagctctt ttggttgggt aaccatggaa 120

aagcatagcg tttggaatga ttccgtaaat ttctgagagc tgctggggaa tgcagaaaac 180  
 gagattaaca cgaaaatata agtttgaatg atgaatgtac agggacgtgt gaagcaacgg 240  
 tccaatctgc ttctggctcag tatgtgaacg tgcatttaat gtttaagtgat tcccttgggc 300

<211> 1821  
 <212> 432  
 <213> DNA  
 <214> Glycine max  
 <215> unsure at all n locations  
 <410> 18217

tagctacaca caccctctta ataactaagc tcacctctctt gagaatcttc cttaanaaga 60  
 ttcttaaga agctagagct tagctacaca caccctctta atagctaagc tcacctctctt 120  
 aagatgagaa gctagaactg tgctacacac cccctataat ggctaagctc acccccatga 180  
 caaaatacat gaaaatacaa aaaaagtccc tactacaaag actactcaaa atgcctcgaa 240  
 atacaaggct aaaatcctat actactagaa tggccaaaat acaaggccta aacgaaggaa 300  
 aaaacctatt ctaatattta caaagataag cgggctcata cttagcccat gggctcaaaa 360  
 tctacctaa ggctcatgag aaccctaggg ccttcccttg gatctctggc ccaatctact 420  
 tggagctcttc ta 432

<210> 18218  
 <211> 386  
 <212> DNA  
 <213> Glycine max  
 <410> 18218

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 ttaatactta atagactatg cttaaaacct tctacaagta acacatttct aatggggagta 120  
 taggaactcg tacctatatt gctgacttca ataatcttgc ctctgttgtt gtcaccatct 180  
 cttaacatgct cacttttctt ggggtaaaag gttgtgaatt tggatacctc tccctctcata 240  
 tctatcctaa ataaagaagt acacaagatt tatactctct tggccacaaa ccttccctac 300

attcagtcac caagcaacct ggcagtcctg agatgtctat caaccttgga aaatccttta 360  
 caagccatag atccacaagg gatgta 386

<210> 18219  
 <211> 404  
 <212> DNA  
 <213> Glycine max

<400> 18219  
 18219

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 agataatggt gagactagca ctgggctaga aggaatttac aaaatgaaag aaaaatgggc 120  
 taattgctat atgatagatg cttatagtat aagaatgcc agtactcacc ttagtgaaag 180  
 tttcaatgct agtgtgaaag attatgtcag atcaagctcg catataatgc acattttcaa 240  
 acattatgag cgaagctgtg atggcdaagca atacaatgaa ttagatgctg aatacaatag 300  
 caggaaaaaa ctgcacgggc taatgataga acactcacca ttattaaagc aggttacgca 360  
 actttacact ccaataatgt taaattccgt tcagaatgaa tatg 404

<210> 18220  
 <211> 314  
 <212> DNA  
 <213> Glycine max

<400> 18220

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 tcatgateat ttgaatttct cgagagcttt cgaatgtttaa tttcgagcgt atcgatatat 180  
 tataacccctg aatcggacct cagtgtgaaa agttatgacc atttgaatgt gacgagagct 240  
 ttcggttgatc aatttcgagt atcactcgat gtgacgcgac ttaacggac attcgagtgt 300  
 aatgtatga ccat 314

<210> 18221  
 <211> 385  
 <212> DNA  
 <213> Glycine max

<400> 18221

agcttcaaga ataattgtgcc tcagcaaact tcttattccc agaaggaaat tcaatagata 60  
 tgcctcttat ttttaattgga gaggggtacc actactggaa aacctgaatg caaattttca 120  
 ttgaggcaat agacttaaac atttgggaag ccataagaat tagaccttat gtacccacct 180  
 caataatgg aacaacgat gtcaa 385

<210> 18272  
 <211> 380  
 <212> DNA  
 <213> Glycine max

<400> 18222  
 attttcctta gagaggtttg gtgctccgtg taggaagaga tggttttgag aagagagaaa 60  
 gaaaaataa attcacgagg atgaataatc gaaaaagcta tttatatcta aggtattcac 120  
 aacctattat ttactctatt gatttattgc tattatttaa taaaaacatt atattttatt 180  
 cctattcaa taaataaata aaatattttt tgtattttct cgaaccatta ttctaattaa 240  
 taattttttt atctatttaa ttataaaatc tcattatctt ttcaaactct tattttattt 300  
 cgaataacaa tcattgttaa atcagtttat aagaaaaatg aaatgttaca catgtaaatg 360  
 ccaatatcaa tataactatg 380

<210> 18223  
 <211> 334  
 <212> DNA  
 <213> Glycine max

<400> 18223  
 tctacattca attccagact ttccgatata ttactgtatt caattggaca tccagatcac 60  
 aagttattgt agtttgaatc tgcctagggc tccgggatcc catttcgagc gtctcgatat 120  
 attacgggac tcaatcggac atcadagtia aaagttaatg atgctagaat ttgctcagag 180  
 ctctggatatt ccatttcagc cctctcgata tatgaaggga ctcaatcaca catccgacgt 240  
 aaaagttatt gacccctcaa tggctcaga ggttcgggat gcaattctga gcaattcgag 300

<210>	18224
<211>	372
<212>	711
<213>	1111

[illegible]

<210>	18225
<211>	319
<212>	DNA
<213>	Glycine max

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<400>      18225
actcaagctg gaccccaagg aagctgctaa tatttcccac acttttggag gcgggccaat   60
cctggatggc caagaattac tcatgggtcca cctgtaccgc atttatacca actaccaaac   120
ctaagaaaac tataatatct acacacaatg tacaettacc tatatatgca catatggcgt   180
tattctaat gactgagaga actagactga gatagcctaa gggaacatga aggctctac   240
tgtacactga aatatctct agacaacctt ctgcggatct agttatgaga tcccataaga   300
catgatgcat aagctctat                                     319

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<210>	18226
<211>	361
<212>	DNA
<213>	Glycine max

4495 18226  
dactilada teqat'och' t'eraayng'e t'yaact'act' t'acat'ggac' t'gat'ggac' 60

ctatgcaagt tgaaagcctt ggaggaaaga ggtatgcta tgttgtgtg gatgatttct 120  
 ccagatttac ctgggtcaac tttatcagag agaaatcaga cacccttgaa gtattcaaag 180  
 agttgactct aagacttcaa agagaaaaag actgtgtcat caagagaatt aggagtgacc 240

<210> 18227  
 <211> 407  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 18227

tgtgtgcac tggctactgc ggaagttaaa catatttctg cagttagctg angagctcaa 60  
 agactctgga tgaagcatca acttgaagac tttggagtaa accttgatca cattcctcta 120  
 aaatgtgaca acacaagtgc gatcaacctt caaaaaaacc ttgtcatgca ttctaggact 180  
 aaacacatag agataaggca ttattttctt agaaatcatg tgttaaaagg tgattgttgt 240  
 attgagttca ttgatagtga gcatcaacta gcagatattg tcaactatacc tcttgctaga 300  
 gataggttct ttttcattag aaatgaacta agcatattag atgcatctag catagaatga 360  
 tattctgttt gcacagtgtg tgtgattgac attgctactc atataat 407

<210> 18228  
 <211> 429  
 <212> DNA  
 <213> Glycine max  
 <400> 18228

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 ggggcctaatt cttataatga actttacaag atgateggac aatgggttgaa aaagttccta 120  
 tccaa'acca caagcaagct cccctttccat gtgtcaacct attcccttga agtcaaaagt 180  
 ctatctaa'a cactcatagt ctaccattt ggatgaaacc argtgaattt tctccccaca 240  
 aatggaatat ctaccatatt catatccaag ataaattcat taaactctct attatcccc 300

ccatgaggat gtgtattatc acttttttctt tgatgcatac cacatacaact attaaaatct 360  
 ccaatagggc accaatgata aatgctactc ccactccctc tacctatgag ttcttaccac 420  
 attctctctt 429

<210> 18230  
 <211> 438  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <240> 18230

agcttctctt ttgtggcagt taaggaaacta gtgaagcata gacaacccaa tactctttaa 60  
 gaactaatat cataggggggt tccatagagt ttctcatagg gagttttggt accaagaaaa 120  
 gtagtaggta tgcagttaac aagaatacca aagtgaatta aagcataaga ccaacaaatg 180  
 aaaggtaaat tagattgaaa caacaaggat ctagtaacat taagcaagtg ttgatgcttt 240  
 cttctacaaa ttctatcttg ttgaggtggt tcaacgcagg aagtttggtg tataattcca 300  
 atttcatcat agaattgtct tagaatgaat tctgatccat tgtctgatct aatcattttc 360  
 acctttatat caaact 376

<210> 18230  
 <211> 438  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <240> 18230

ctagcatcaa tgacagacca tttttaataa atgagtgatt tgctcnaatt catgctttta 60  
 tactatcatg tatatacccc caaaattatt agagtgtggc aacaatgtct ttgatagtag 120  
 aaagtcaaca atatagataa tatgtaaata aatatgttgt ctacaaaaat caatgctacy 180  
 aagacatggt taaatgactc ttgagaacat cacatataaa tagagatatt ctaacatatt 240  
 tttatttatt tttttaagtg taaataaagg agaaaagaaa taaataagat aaaaatatta 300  
 tttttgggtc gctacacac aaaaacaaaa aaaattccca taatttatta ctaagaaaga 360  
 catgtagggt tttatattta ttcttctctc ttttttaaaa attaaataat ttgttaaaaa 420  
 ttttaaacat taaatatt 438

<210> 18231  
 <211> 363  
 <212> DNA  
 <213> Glycine max

<400> 18231

18231 18231 18231 18231 18231 18231 18231 18231 18231 18231

18231 18231 18231 18231 18231 18231 18231 18231 18231 18231

aaagaaacaa tcaagadaat aagaatagat tattacagct aaccaatcaa caagccttcc 15  
 aagtagccat gcttgagatt gcttgcac ataaaatatt tcaattaact cccacgcagc 240  
 ttccaaagat gtaggctctt caccctctct tattatgtgt aatgtgttaa aaagcaagtg 300  
 attaaacttc cggatcata attccacaa agcagatctc agtcagcta aacacggtaa 360  
 aac 363

<210> 18232  
 <211> 370  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18232

gggattcact cgtcccgga tottagagtc actgtatgct gcaagcttct acattcaatt 60  
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 ttgaattggc tgaaatcttt aacaattaat ttccagcgtc tggatatgtt acggtacttc 180  
 atcagacatt cgagtaaaaa gttattgtcg ttgaattaa ctccagagctt caacattcaa 240  
 tntcagcgt ctccatatat tccagagctc aatcagacat ccgagtaaaa agttattgtc 300  
 gtttgaacta gctcagagat tcaacattga atttcagagcc tctccatatata ttccagagact 360  
 caatcagaca 370

<210> 18233  
 <211> 416  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18233



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 tttctgggat gtctgggtga gtcccgtagc atctcgagac gctcgaaatt gaatgttgaa 180  
 gctcttagct aattcaaacg acaataaactt ttttcacgga tgccttatac attcaaaaga 240  
 gctcttagct aattcaaacg acaataaactt ttttcacgga tgccttatac attcaaaaga 300  
 aaactcttag ctcaatcaga caacataaac ttgtactctg gactcttagt tgaatt 410

<210> 18234  
 <211> 410  
 <212> DNA  
 <213> Glycine max

<400> 18234  
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 cttatgaaga tgagcatggg ttttaacccac taactctctt tgacctttcg cctaattgctg 120  
 ctgtttataa ccataaagaa cgtcaagcaa aggcggacta tgagaaaaag cttcatgaga 180  
 gagtacaga tcaaattgag aggaaaagta acagctatgc taaacaagcc aacaaagga 240  
 gaaagatggt tgtcttctaa cccggagatt gcgcacgggt gcacatgaga taagaaacgt 300  
 ttctgaaca gaggaatca aagcttcaac caaggcgaga tggaccattt caagtgtctg 360  
 acagaatcaa tgacaatgct tacaaaattg agctgcccgg tgagtataat 410

<210> 18235  
 <211> 348  
 <212> DNA  
 <213> Glycine max

<213> unsure at all n locations  
 <400> 18235

ttctttaact cggatgtctg attcaggcgc ataatatatc gagacacttg atattgaata 60  
 agagaagctc tcgagaaatt cgaatgggtc taacttttca caccgatgtc cgaattcgggc 120  
 gcataatatg tcgagacgct cgaatttgaa caacggaagc tctcgagaaa tctaatggc 180  
 cataactttt cactcggagg accgatctat ggcataata tatctagacc ctcgaaattg 240  
 aaaaacggaa gctcccgaga aattcaaatg gtcataaact ttaactcaga ggtccgattc 300

atgggcataa tatatcgaga cgctcgaata tgaacactcg aagctctc

348

<210> 18236  
<211> 416  
<212> DNA  
<213> Glycine max

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tttaactcgg atgctcgatt gagtcccgta atatatcaag acactcgaaa ttgagaataa  
aagctctgaa caaattcaaa cgacaataac tttttactcg gatgtgcgat tgagtcacgt  
aatatatcta gacactcgaa attgagaata gaagagctga gcaaattcaa acgacaataa  
ctttttactc ggatgtccga tggagtcctg agcgtctcga tatattatgc gccaaagttg  
gacatccgag tgagaagtea tgacaattat aattgctcga aagcttacat tgttca

<210> 18237  
<211> 368  
<212> DNA  
<213> Glycine max

<400> 18237  
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tctaaagata attagttggc tatttaaaat agtcgtaata tgtaaaagat tacgataatt  
ctatatcaat tatgtatttt ttttctttta accaatagat atgtaaaaaa tgattatcaa  
accatccgag tcaaatatct tagtggatta gaatcgctaa aaatcatttt taaaaaaatt  
tatgataatg gtgatggta aaaatcatta taaatcgtga aactataaat aaattatata  
aagagaga

<210> 18238  
<211> 430  
<212> DNA  
<213> Glycine max  
<213> ensure at all n locations

<400> 18236  
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 gtttatgagc aactcaggat tcagaagatg tgacatggac cattgtctgt atgtaagaa 120  
 atatactaar agtrangtra ttctgttga ttangttaar gacatanga ttgcaggatc 180  
 ctggaagccg tctcaggaga tatataraca caaatiggti gacatggtt acattatada 240  
 ttcttaagacc aggaatgccc ttctgggac tcatttgaag ttccaagaa gcaatctatg 420  
 cagacagatg 430

<210> 18239  
 <211> 427  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 18239

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 tcatgcacag tccatagagt gtcaccacct ccttgtaaaa taagtcagcg acatggaaag 120  
 catcatcaac ctttttgcaa ggtataaaat gagtcatttt tgaaaacttg tcaataacca 180  
 caaaaacaaa atctttgcca ctctttgttc taggcaatcc caaaacaaag ttcatagata 240  
 tgrcaatcca aggaaaatta ggaacaagca aaggatgata taaattaagt ggcttcactt 300  
 ttgattnttc ctttttacia acaatgcatt gttcatagta tttatgcaca tcacgtttca 360  
 tatggggata ataaaatgct catgcaatgt ttcttaagtc ttttgcctgc caaatgccc 420  
 catcaaa 427

<210> 18240  
 <211> 285  
 <212> DNA  
 <213> Glycine max

<400> 18240  
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 acccttgcct ggatctctat ttgggtctta accctctcat gcaacttct tacaactctt 120

gacctagatt ccccttcttt atgtataaaa gaagtgtcaa gagggatggg aatgaggtct 180  
 accggtgtta agggattgaa cccatagaca acctcaaaag gggattgctt ggtgggtcta 240  
 tgaacccctc tattgtagge aaattctaca tgaggaagat actca 244

<210> 18241  
 <211> 385  
 <212> DNA  
 <213> Glycine max

<400> 18241  
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 ttctttatag ttggagtaaa acygggaattg aataaattaa atgattaatt attgtttttt 120  
 cttgtaagaa ttaattgtct atgtgatagg catatgaatt atgtagagaa taataagtaa 180  
 ataattaacg atbaagggct aaattgfaat tgggcttaatt atgagaagta tctagagcta 240  
 actgtacttt gatgggagta gtgattataa atgggggata ataccacta acgttaaata 300  
 aggtcccttt cctgactaga aagtgtgctc tctcacctat agtcattacg aacggagaga 360  
 gaca 364

<210> 18242  
 <211> 385  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 18242

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 aatctaatac aacaacaatt aaactaatat aggttatatt gttactcatt taatatgaaa 120  
 atatataga tataaaatgt ttttcaaact aactaaataa aagagtggat gcatgtgtag 180  
 gttaatagcc tataactaaa acctttataa cataacattt gttttctctg agaaaacatc 240  
 tcaattgttt taaggtgttg ctacgtgtac caatcatatt actgtgtcac ccagcacaaa 300  
 aaatttaatt tggaaaatgc tcttatngc tttttcttcc cttaagttt cnttttttac 360  
 aataacacag taattctttc atttt 385

<210> 18243

<211> 416  
 <212> DNA  
 <213> Glycine max

<400> 18243

ttat tacaac aaatctctaa taccacaaac catggtttct gaacatttgg ttggatgand 60  
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 tttgtgtat tttgtgtat tttgtgtat tttgtgtat tttgtgtat tttgtgtat  
 atgtgtgtga agtggaaaca tttagcaaca taacaaccta tgcctatcua aaattcttlt 120  
 ggaagaatat cattacacgc tttagaattt caaacacatt ggtaaaaaaa atgggtttaca 300  
 attcacagaa tgaatgtctc atgagttctt aagcagcctc gaaatcaaac attgggtgac 360  
 gtttgtagaa cccccccaaa ccaattatca atctaaagca gccacaaga taattc 416

<210> 18244  
 <211> 385  
 <212> DNA  
 <213> Glycine max

<400> 18244

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 acttgggttta tgcctagatg gatttatata caatcattat ctccacctta tttggcttgg 120  
 tcaatcattg ttaccccata caatcttctt ccagaaatgt gtatgactaa accttatatg 180  
 tgtatcaaga ctaaacctta tatattcaaa gttcaatgag caatttagga aacatggatt 240  
 tgaacatgat gcctctatgg tgagaaatc aattctagca aatccaccaa accgtttagt 300  
 caaatttcta cttaagagcc atcaaacctt aatcaggaga gaaaaatata gagagagact 360  
 ttatt 365

<210> 18245  
 <211> 386  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18245

aggtttctct ttattttct actagagatt ccaaggttta gagaaaaaaa gaagggtatt 60  
 aggtttcaat ttactgtct ttgtgtgagg graatttctc tctctataga cattatttgc 120

aaatcccaac tgtgagaatg tgaggaaata agttctgaag ttgatgtccc aatttcagaa 180  
 caatcgaacg gttaacgagt ctgggatcat aatttactg gyataggttt ggggtgatgc 240  
 gggaaaaaga gagggttatg gaagataaag aagggagaat gaatttgaag garaggaaga 300

<210> 18246  
 <211> 383  
 <212> DNA  
 <213> Glycine max

<400> 18246  
 agtttgagaa tggagaattg cacaaagcaa tcactacgca tggctccaaa gtccaagggtt 60  
 taaaacacat gaacgaaaac gcaattcatg gggctccgaa aaaggggtta caatggagaa 120  
 ttgcactaat caatcactac gcatggctcc aaactcgaag gtggaggaca catgaacgaa 180  
 aacgcaattc atggggctcc gaaaaagggg ttgagaatgg agaattgcac taagcaatca 240  
 ctacgcatgg ctccaaactc gaaggtggag gacgcatgaa cgaaaactca attcatgggg 300  
 ctccgaaaaa gggtgagaat ggagaattgc actaagaaat cactacgcaa agtttcaaac 360  
 tcgaagggtgg aggacacatg aac 383

<210> 18247  
 <211> 384  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18247

abcttcgggt tgaagtttg taggcgtngg atcttcttca tcaatggagt catttgcctc 60  
 ttgaagatca tggcagcgga atagagaagg aagaaagatg attggagacc ccaactctagg 120  
 agatgatgag tcaagaagaa gctcaccacc acaggaagcc atggataaga gcttgaagga 180  
 aggcgaatat gagtggaggg agagggagag aatgggcacg atatttctatg cctcanatga 240  
 ggtctgaact ttgaagtgta attctcaaat gatcaaatg caaaaaatgc acacacatgg 300  
 cctctattta tagcctaagt gtcacacata attcgagaga aatttgaatg tctattcaaa 360

<210>	18248
<211>	392
<212>	DNA
<213>	Cloning Vector

ttttgaattt tttttttttttt tttttttttttt tttttttttttt tttttttttttt  
 tttttttttttt tttttttttttt tttttttttttt tttttttttttt tttttttttttt 120  
 tttttttttttt tttttttttttt tttttttttttt tttttttttttt tttttttttttt 180  
 tttttttttttt tttttttttttt tttttttttttt tttttttttttt tttttttttttt 240  
 tttttttttttt tttttttttttt tttttttttttt tttttttttttt tttttttttttt 300  
 tttttttttttt tttttttttttt tttttttttttt tttttttttttt tttttttttttt 360  
 tttttttttttt tttttttttttt tttttttttttt tttttttttttt tttttttttttt 392

<210>	18249
<211>	386
<212>	DNA
<213>	Glycine max

```
<223>      unsure at all n locations
<400>      18249
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ttcacccgac	gaagacactg	acaaaaagtt	atcttctcct	ttttggacaa	agtatgacag	120
ctaggggcaa	gntaaatttc	ttcccatcag	accttggatg	caactgtgat	cgtatcccca	180
tctcaactag	atcttgacgg	gtattcaagc	cataccttct	cttgccttaa	atgttaagga	240
gggtcccaat	cacactgtca	catacatntt	tctcgacatg	cataacatta	atacaatgtc	300
taacgtctag	atcagaccag	tatggaagat	aaaagaaaat	gaacctcttc	nttcatatgc	360
agttcttaac	tttattcttc	ttttgg				386

<110>	18250
<111>	438
<112>	DNA
<113>	Glycine max

<223> unsure at all n locations  
<400> 18250

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gtttcatggg ctttttttga ttatatgcta caaagaatgg gtttttgtcc caaatggaga 120  
aaatgtgta ctttttttga ttatatgcta caaagaatgg gtttttgtcc caaatggaga 180  
aaatgtgta ctttttttga ttatatgcta caaagaatgg gtttttgtcc caaatggaga 240  
ctaggataac aaatgggttg cattttgaga tgattaatac actgggttag tacttcaatr 300  
tattctttag aaccaataag gagactgagt atttaaagta aaaatataga ggacttccat 360  
antttggaaa catgaatg 438

<210> 18251  
<211> 429  
<212> DNA  
<213> Glycine max

<400> 18251  
tatgtctgat acatttataa tagacccctt cttcttttaa accaacaaca gcagaataat 60  
gatgatcttt caagcaacag atacaatcca gggttgataa atcatccaaa tctgagatgg 120  
gtaagtcttc cacaacaaca acagcctgtc cctcccttcc agaatgttgc tgggtccaagg 180  
aagccatatg ttctctctcc aatatagcag caacaacaac aaagacaaca agcaactgag 240  
gtcctctctc aaccttcttt agaagagtta gtgagtcaaa tgaccatcca gaatatgaaa 300  
tttcagtaag agacaagagc ctccattcag agtctgacaa atcagataag gcagaatgct 360  
actcagttga accaagctca gtccaaaatt cttacacatt gccttcasat actgtgtaga 420  
atctgaaaa 429

<210> 18252  
<211> 374  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18252

agttctcag ttgttttgg atgnacatt tcaatacttg gtaaaatggg ataangggct 60



ttaataaaac atttgggagt gatatttaac tattgtaaat tattggccga gtggtctacc 120  
 tagagggaga tcccaataat tctagtgatg atttgtggaa ttaacttgct gtatgatgcc 180  
 attcaattgt gaacatgagt tgataattgt gaaattgggt ccagagggat tgaccctgat 240  
 gtaattcca ttgacattg taggcttaag atcttccca ttaattgatt ccttggattg 300  
 ttaattgatt ccttggattg ttaattgatt ccttggattg ttaattgatt ccttggattg 360

<210> 18253  
 <211> 437  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 18253

nttactgaa ttgcaatgt tccaattggt ttttaattgg tgtaatcgat tacaatatat 60  
 ttgtaatcga ttaccagtgt atctaaacgt tgaaattcaa attcaattgt gaagagtcac 120  
 atcttttcat aaaatgcttt gtgtaatcga ttacatgggt ttggtaatcg attgccagtg 180  
 acaagttttg aataaaaaac aagagatgta actcttccaa tgctttttctc aggattttct 240  
 caaggttata actcttccag tgattttctt gaccagacat gaagagtcta taaaagcaag 300  
 accttgattt gcattntaat aactttctca taactttntg aacgtctttn tgaacttctt 360  
 cttcttcttc ttcctttgcc aaaagcttct taaagttttt ggtttctaaa ctttggtctt 420  
 tcaatagaaaa caaaagt 437

<210> 18254  
 <211> 365  
 <212> DNA  
 <213> Glycine max  
 <400> 18254

agtttggcat gaatcgtgcc atgtgtacta gtaaagaggt tgucataac ctgtcataaa 60  
 acaaaaccat aaactaaaaa aagcattatg gattcagtgc aaaataaaaac caaccattta 120  
 caaaaaccaat taagaaaata agaattgatt attacagcta accaatcaac aagcctttca 180  
 gtttaaccatg cttaacattg ctctctcaca taaaatatat caatttaactt caaccagct 240  
 ttaaaagatg taggctcttc acctctctat attatgtgta atgggttaaa aagcaaaaac 300

ttaaattctc ggtatcataa ttcccacaag cagatctcag ctcagctaaa cacgtgaaaac 360  
 aaatt 365

<210> 18256

<211> 375

<212> DNA

<213> Glycine max

<223> unsure at all n locations

gtgcagaaga aaatgagaaa tttaacaaac attgtgttgt tatgtttttc atttttaatt 60  
 gtaatgttag ttttaggggg aatgtatttt aggtaaaatg tgaatatagca gcttttgata 120  
 ttgtaattgt tgttttgctg aagaatttgt agtaggaagt agcttttgya gtgtaatagc 180  
 agcttttgtt gctactgtca attgttgttt tgcgaagaa ttgtaatag gaagtagctt 240  
 ttgtagtgtt atagcagctt ttgttgctac tgcgaattac ccatttcaat taaatataat 300  
 ttgttggtga aatttggtgc tgaaatttgc agtgtattaa atataattta ataaaagata 360  
 gagaattatg taataagacg cagctcataa tgtatgttgg gatggattgt actactccaa 420  
 ct 422

<210> 18256

<211> 375

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 18256

agttttacat atttccaact aaaatgggtc tgtcttgcaa taagattgta cttgtttgat 60  
 gatccagatc atatgatggc aatgaagatg atcaaccaag cactgtgagg aaggggaaaa 120  
 taaagtcttt cacttcttat tgtgggtggac ttccatctcc tgaagctgct aacaatccat 180  
 tagcatataa attcaggtac ttcttgggaat gtctttgtca aactcaagag taaggatacc 240  
 caattatgta ttaattaga catgatttat aaaacatttg aatatcttag tgaagtctc 300  
 caaaacccaa tgcctttgaa cctctctgctn tgtagtattt tcatctggct aaccattcaa 360  
 ctatagtatg tcaaa 375

<210> 18257

<211> 349  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18257

ttgtctcaag agacttatat taacaaagtt tcaacagagat ttacatgaa

gaggttcgtat atgaggtgaa acaatttctc togaagaact ttgaatgaa tgatatggga

gaggttcgtat atgaggtgaa acaatttctc togaagaact ttgaatgaa tgatatggga

gaggttcgtat atgaggtgaa acaatttctc togaagaact ttgaatgaa tgatatggga 240

gaggttcgtat atgaggtgaa acaatttctc togaagaact ttgaatgaa tgatatggga 300

gaggttcgtat atgaggtgaa acaatttctc togaagaact ttgaatgaa tgatatggga 349

<210> 18258  
 <211> 402  
 <212> DNA  
 <213> Glycine max

<400> 18258

ttcacacttc catgtogaat aggcaataaa ccttcgcttg atattgatcc tccaatgag 60

actatgcagc tccctcttgt tttgaggtgg cctcacttcc aacattgctt tagctttatt 120

tttatctgtc ttgattcttc tttgatggaa aaggaaaccc aaaaagtttc cagttgatac 180

tccaaaagca cattctcaa gattcatttc taagtttatg aaacctcacc cttaaaagag 240

aattctccaa atcaccaagt gtttttcaa attggatgac ttaacaacca catcatcaat 300

gtaaacctcc atcaatttgc taatcaattc atggaaaata acattcttag cccattgata 360

ggtagctcct aaattcttca aaccgaatga cattaccaat ca 402

<210> 18259  
 <211> 379  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18259

agtttttgaa ttattcaaa' ggtcataact tttcactcgg aggtccatatt caggggcata 60

atatacgaat acgtcgaat ttgaacaatg gaactctctg agcaattcaa atgggttaac 120

tttttactca gatgtcctat tcaggcaaatt aatatatoga gacgctcaaa attgaacaac 180  
 agaagctctc gagaaattca aatgggcata acttttaact cggaggtctg attgagggcg 240  
 attatatatc aagagctctg aaattgaaca atggaagctc ttgagcaatt caaatgggtca 300  
 taaatttca ctcggagggtc ctattgaagg gcataatata tggagaggtc agatattgag 360  
 tttttttttttt

<210> 1826  
 <211> 419  
 <212> DNA  
 <213> Glycine max

<400> 18260  
 tccattgttc aatttcgagg gtctcgatat attatgtgtt ttaatgagac ctccgagtga 60  
 aaagttatga ccatttgaat tgcctcaagag ctccattgt tcaatttcga gcgtctcgat 120  
 atattatgcg cctcaatcgg acctccgagt caaaagttat gaccatttga atttctcgag 180  
 agtttcogtt attcaatttc gagcgtctcg atatattatg cgcctgaatc ggacctccga 240  
 gataaaagtt atgaccattt gaattgtctc agagcttcca ttgctcaata tcgagcatct 300  
 cgatatatta tgcgcctgaa tcggacctcc gagtgaagag ttatgactat ttgaattgct 360  
 taagagcttc cattgttcaa ttccgagcgt ctcgatatat tatgcgtttg 410

<210> 18261  
 <211> 439  
 <212> DNA  
 <213> Glycine max

<213> unsure at all n locations  
 <400> 18261

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 gcaagttgaa agccttggag gaaagaggta tgcctatgtt gttgtggatg atttctccag 120  
 atttacctgn gtcaacttta tcagagagaa atcagacacc ttggaagtat tcaaagagtt 180  
 gagtctaaag cttcaagag aaaaagaactg tgcctcaag agaattagga gtgacctgg 240  
 cagagagttt gaaaacggca agtttactga attctgcaca tctgaaggca tcaactcatga 300  
 attctctgca gccatcacac cacaacanaa tggcataatt gaaaggaaaa acaggacttt 360  
 tcaagaagct gccagggtca tgcctcatgc cnaagaactt cctataatc tctgggctga 420

agccatgaac acagcatgc

<210> 18262  
 <211> 425  
 <212> DNA  
 <213> Glycine max

<220> Feature  
 <221> CDS

atcgatcat ttcdaatata gtaattctct tacccttcaa ccttgatata ttttaaggga  
 ttttgatgag atcattttatc ctactgagca atgtgggggc ttcttttcta atgctagagc 120  
 taatgtcttt ggtagcatga ttgatgtgtg tttcttggtt gatgtttact ccatcagtag 180  
 ttttttctact tggtaaaaaa ggtgtagaaa taatgtttatc atctcccgta tgttggataa 240  
 atgcttgact agtgatactt ggaagaatat gtttctaat gcttatgttg aggttctttg 300  
 caggatgcac tcaaatcata atctcttatt cttgagatgt gatcgtcaag agaatagagg 360  
 tgtcaaacct tttatattcg aagcaacgtg aaccactcac ccacaataca agatttgtgt 420  
 tgcta 425

<210> 18263  
 <211> 444  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18263

ntcaatgctc ttaagcaaaa gttaaccaat gccccatac ttgctttgcc aaatttttca 60  
 aaatcttttg aaattgaatg tgatgcttca aatgttggga ttggggctgt attgttacaa 120  
 gaaggtcac taattgctta ttttagtcaa aaattaagtg gtctaccct taactattct 180  
 acttatgata aggagttgta tgccttagtg agagcgttga aaacatgaca acgctatctt 240  
 tatectaagg agtttgtgat ccatagtgac catgagtcac taaaatactt aaaaggacaa 300  
 gctaagctaa acaaaaggca tgccaaatgg gtgaaatttc ttgagcaatt tcttatgtt 360  
 attaaacata aaaagggaag aggaaatatt gttggggatg ccttgtcaag gagaaacttt 420  
 ntgctttcta tgccttaaac aaaa 444

<210> 18264  
 <211> 423  
 <212> DNA  
 <213> Glycine max

<423> unsure at all n locations  
 <400> 18264

gctctggag tggagatggg agtctctggtt agtctctggtt agtctctggtt  
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 ataataagag ccttccaaa ttgggaacat taccctggtt ccaaggaatc tgcattcat 240  
 agtgatcgc aatcactaaa gtacattaga gggcaagca agttaaaca gaggcattgc 300  
 aatgggttag agagccatga ggggtgggtc atgggccact atgggataga caagaccctt 360  
 gttttactca naaaaaagt ttattggccc catatgaaga aagatgtcca taagcattgc 420  
 act 423

<210> 18265  
 <211> 384  
 <212> DNA  
 <213> Glycine max

<400> 18265  
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 tgttatgttt tatttttatt taattgattg tggagatctt aaatcttggg ataagaaggc 120  
 ttatgttggt ttttgttttg ttttaatcga ttgtggagat cttgaatatg gagaaaagat 180  
 ggatttatgt tgtgttttta ttttgtttta attgaatgtg gagatcttga atatggagaa 240  
 attgaatttg agatatcatt catgtttcta tttttttaac ttcaattaat ttgacatgt 300  
 tttaaactgc caaaaaattg taatttgatt ttctgaatga atactagagg gtttaaaaac 360  
 tactgaaatt gtaatttccg aatg 384

<210> 18266  
 <211> 371  
 <212> DNA  
 <213> Glycine max

<400> 18266

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 tctgtgaagg gccactggt caccctcgag gccacaaaag cctgtccaa agagcaactc 120  
 gactgacggg tgaacggaa cttccacatc tccccggcg tttccatgag caccctccta 180  
 atcatgtcc tttccatcacc cttccacatc tttccacatc tttccacatc tttccacatc 240  
 tttccacatc tttccacatc tttccacatc tttccacatc tttccacatc tttccacatc 300  
 tttccacatc tttccacatc tttccacatc tttccacatc tttccacatc tttccacatc 360  
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<210> 18267  
 <211> 406  
 <212> DNA  
 <213> Glycine max

<400> 18267  
 .  
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 tcttgcactg aattgttggg agttggaagt catcttctca atcaaatcc accactggca 120  
 gttacatca tactcctctc catgttgcta agtccctcat agaaatattg aagaaggagt 180  
 tgcacagaaa tctggtgggt aggatagctt gcacacaatt tcttgaatct ttcccagtac 240  
 tcatacaagc tctctccact aagttgctg atgctgaaa tgtctttct gatggcagtg 300  
 gtccatagatg caggaagaa tttctccaag aacacctct taaggctatc ccagctgata 360  
 atggacctgc gagcaaggta gtagagccca attttgcca ctccct 406

<210> 18268  
 <211> 433  
 <212> DNA  
 <213> Glycine max

<225> unsure at all n locations  
 <400> 18268

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 tgaagattac taaatgggt tcaataata gtagtaggaa taatgactat gaaataaagg 120  
 catgtgatgt ttgcaaaagg gctaagcaaa ctgagatag ctttcttcta acaataata 180  
 atgagcaga tttgtttgag ttgttcatc gtcacatata ggggcttct aaaactccat 240  
 attcatgtgg tcttattat ttttaacta tagtggatga ttattctga gcaatttggg 300

tttttttgtt gttagataaa aggggaagcac ctctgtgcttt gntgaattta attgcattag 360  
 tagacaaaaca atatgaaaag gagggtaata tgatttgaag tgataatgga accgaattac 420  
 atgtttgcca act 433

<400> 18269  
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 agagagcaag aaatgaagag ccaatgggtt atacatggac ggagataaaa agatcatgag 120  
 gaagcgggtat gtgcgggcta gttactcaag ggacttgaag ttcaagctcc aaaaactaac 180  
 ccaaggcaac aaggggggtt aggagtattt caaggaaatg gatgtgttca tgattcaagc 240  
 aaatattgaa gaagatgagg aggtaaactat ggctcgattt cttaatggtt tgactaatga 300  
 tatccgtgat attgttgagc tgcaggagtt tgttgaaatg gattatttgc ttcacaaaagc 360  
 aatccaagtg gagcaacaat t 381

<210> 18270  
 <211> 389  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 18270

tctgttgaat gtccacgctc tntcccttaa tacttgtatt actacgctcc catattttctc 60  
 tgtatacata tattctcaat ttaatgtatg tgtcatgtgt gtatacacgc tatgctctag 120  
 ctatctagtc aaatgtaatt gtatccatga ccatatatac acattaaaaa gaagataaaa 180  
 catatttttt tctcgtatat ttctggtcaa acttaatggt aatttttcta ttaaataggt 240  
 gaaatgtaag agactaaata caettgattg ttttaataaa gtatagagat taattagaag 300  
 tacaaggatt aaaaatatata ttatatctta tgacaaacaa ctgaaaatca atatgagatt 360  
 taaattaatt aattatatac tatttctatg 389

<210> 18271



<211> 425  
 <212> DNA  
 <213> Glycine max

<400> 18271

actcggctta cactcagccc tttcagaaga gaatttcctt attcctcact cctacatgat 60  
 tttcagctt cctcagctt cctcagctt cctcagctt cctcagctt cctcagctt 120  
 cctcagctt cctcagctt agactt cctcagctt cctcagctt cctcagctt cctcagctt 180  
 ttagggtcta gttctctctc ttgtggatla taaattctta cttcagaaga acatccccaa 240  
 atgcgtatat gtgcgaaact tggtttccaa ccttgaata gtcctaaaagg tgtctttgag 300  
 acatctttgg ttggaactcg gtttaataa taagcaaccg tcttaagagc atcaatccaa 360  
 aaaaattgag gaagctttac attactcctt atgcttctca ccatgtctaa taagggtcga 420  
 tttct 425

<211> 18272  
 <211> 294  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18272

cattatcttc atcatgaatg aaagcaatgc atcattcatt gtgatttaaa gtcattgcaat 60  
 gtccttcttg atgatgacat gactgctcat gtgagcaatt ttggcatagc aagacttctc 120  
 tcaatcatca atgcctacca cttctaagca aacaattaca attggaataa aggggactgt 180  
 ttgctatgct cctccgggta tgttctaaaa tctaaactgg tgaatgaatc agnntttctt 240  
 tgaatccccct atttttttat aaacacttta tatttactaa atacaaagta ttga 294

<210> 18273  
 <211> 441  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18273

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 atagacagc tccaaaatga tccacgggaag cctcagacaa attgactggg acataactta 120

tccacccgag gtccgataca tgaacatccc ataccgatac gctcgatatt gaacaaccga 180  
 agctgtcgtg aaaccggaaat ggtcataaac cttcacacgg atgtaacgatt catggcgatc 240  
 agatatggag atggtcgata ctgaacaacg gaggcctctg agacaactaac attgtcataa 300  
 gttccactc ggtttgcta ttccacacac ttccatagc adagctcga aattgaacaa 360  
 acatcatata ttgagatgcc c

<210> 18274  
 <211> 315  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 18274

agttttgaat tghgtgtcgn tgtcagtjac aatggcgat gggaggccgttacctgcatt 60  
 gaagtgtctt caagtgaatt ttccacactc gttggtcgtt atttcaccat tggctttctt 120  
 tccatccact tagtaaaata gttgatggca actagtaagt acttgacagc tcttagagcc 180  
 ttgggcagtg gtcccagtat gttctttccc cacctgngga agggtaaagt ggagctaaga 240  
 ctgtgaaggt tgtcaggagg agtgtgtggc acgtctgcaa actcttgaca tctgtctgat 300  
 ctcttagtaa agtcg 315

<210> 18275  
 <211> 382  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 18275

tccctaagaa gattcgtaaa gaagctagag cttagctaca catacctctc taatagctaa 60  
 gttcacctcc ttgagatgag aagctagagc tttagctaac accccctata atagctaagc 120  
 ttaccccccac gacaaaaaac atgaaaaata aaaaaaagtc cttattacaa agacaactca 180  
 aaatgccccg aaatacaagg ctaaaacctt atactactag aatggccaaa atacaaggcc 240  
 ttgacgaagg aaaaacctat tctaattttt acaaagataa gggggctcat acttagccca 300  
 ttggctcgaat atcacccta aggttcctga gaatccctag gtctttcttt ggatctctag 360

<210>	18276
<211>	360
<212>	DNA
<213>	glycine max

ctggtatggt ctgggtcaaga acaccatatt aagagttaca aactttagaa aactttagaa 120  
 accattggaa gaggtacatc ttgggatgtt aattcaaaac ttatcactgg taatcgacta 180  
 ccaaatcatt gttgatagtg cttatctcta ctgagtttat aaaagattgg ctaaagtatt 240  
 gttaaaacat aggcacttag actatgaatg aaagctggag ttgcttgcca tgatgtgcaa 300  
 cgttatgtct aaaaataaga tcggyctgca caatgcacac tgcattacga aatgtcaaat 360

<210>	18277
<211>	370
<212>	DNA
<213>	Glycine max

<400> 18277

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gcttgctaag	ggtagagaga	ggaagactag	agatttgga	caagtaaagt	gtgttaagga	120
tgaagaaggc	aaagtcttag	tgcattgaaa	agatatcaag	gaaaggtgga	aggcgtattt	180
ccacaactta	tttaatgatg	gatatggata	tgactctagc	agtctagaca	caagagaaga	240
ggaccggaac	tataagtact	atcgtcggat	tcagaaacag	gaagtaaagg	aagcgttgaa	300
aagaatgagt	aatggtaagg	cggctggggc	agacaacata	cctattgaag	tgtggaaaac	360
tcttgagat						370

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>210>      16258
>211>      435
>212>      DNA
>213>      Glycine max

```

12235 measure at all 11 locations  
12236 12239

paqetbongt fgttcaattt cgaagcgtctg gatatattat gtttcaaaatt tttaacatccu



ataaagcact cacatccaaa tggatgagag tatgaaatat tgggtcttct tctctctat 300  
 ggatcatacg gagacttttt tatcaatggg ctgatcaata ttctattcta aacatagcaa 360  
 gttgtattta ctacttctgc tcaaagtact t 391

<400> 18281

tcatgagaaa gtaaaagatc aaattgagag gaaaaatatt tgttatgta aacaagccaa 60  
 cgaagggaga aagaaagttg tcttcgaacc cggagattgg gtttgggtgc acatgagaaa 120  
 agaaaggttt tcggaacaaa ggaaatcaaa gtttcaacca aggggagatg gaccatttca 180  
 agtgottgaa ataataatg acaataatta caaagttgag ctacccggtg agtataatgt 240  
 tagttccacc ttaaatgtat ctgacttate tttttttgat gcaaatggag aatccgattt 300  
 gaggacaaat ccttctcaag agggagagaa tgatgaggac atgaccaaga gcaagggcaa 360  
 ggateccactt gaaggacttg gaggacctat gacaaggtct agagcaagga aagcaaagga 420  
 agctcttc 428

<210> 18282  
 <211> 415  
 <212> DNA  
 <213> Glycine max

<123> unsure at all n locations  
 <400> 18282

tcaagaatta tggcttcatt ttactacctg ttctccgatg gaaatnctat aaatagacct 60  
 cctatcttta atggagtggg ttatcactac tggaaaaccc gcatgcaaat ctttatagag 120  
 gcaatagatt taaatatttg ggaagccata gaacaaggac cttatgttcc ctctataata 180  
 gctgcaagtg caacaataga aaaacctaga gcagatttga ctgaggaaga aagaagatta 240  
 gtaaatata atttaagggc caaaaatatt attacatctg ctttaggaat agatgaatac 300  
 tttaggggtt caaattgtaa aagtgctaag gatatttggg atacactaca agtaacacat 360  
 gaaggcacaa cagatgttaa aadattatg ataaacactt taactctga atatg 415

<400> 18.33

<210>	18284
<211>	428
<212>	DNA
<213>	Glycine max

<400> 18284

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:210>      18285
:211>      376
:212>      DNA
:213>      Glycine max

```

1995 1996

- 624

aacacatgag aaattgatta gagaaatata ttgagacaca caatttcgtg ctccttctct 120  
 cctctccct ccactcctct tctccttctt tcaagctctt atccatgggt tcttatgggtg 180  
 gtagcttct tcttgaactca tcttctgctt gaagtggtcat ctccaatcat atttcttct 240  
 tcttcttctt tcttcttctt tcttcttctt tcttcttctt tcttcttctt  
 tcttcttctt tcttcttctt tcttcttctt tcttcttctt tcttcttctt  
 tcttcttctt tcttcttctt tcttcttctt tcttcttctt tcttcttctt

<210> 18286  
 <211> 391  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 18286

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 tcttttagtt aaggtatgtg acttttttta caaaactgat atcaaataaa aaattatata 120  
 agtttttcta aaaatggtaa taaaaaatta aaaactataa aattttaaag gataaagtga 180  
 ttgctcatta aagaatttgg tctagacagc agaatgacat gattgctcat taaagaattt 240  
 ggaaacagaa atatcattcc tcccccttag aatttttaat ttatcattaa aaaataaata 300  
 aagatagact cttggaataa agtaattntt tcagataaaa aaattactaa tgactntaca 360  
 agaatttaac caactactaa tatgaaattc t 391

<210> 18287  
 <211> 334  
 <212> DNA  
 <213> Glycine max  
 <400> 18287

agcttttgtc cctgagaaac tggttcccag aagacaacag ggagtgaaga ttgctgaaaa 60  
 ccttagcctt gcaacaagtt ctagggaagt agacaaggag atggacaaga aaatccgcag 120  
 tcttctgagt agtatttga aagacgctc tcttctgat gcttgtgaag atgttccaac 180  
 atcttccacc ccgaatgtt ctgtgcccga tcttgagaaa gatattccaa catcttccgg 240  
 gccaatctt gaagtactct cttcccccag caaagagaga tcaacagagg aagatgata 300

agcgacaaag gagacccctg caccaagggc acca

334

<210> 18286  
<211> 417  
<212> DNA  
<213> Glycine max

18286

caagttgaaa gcttggagg aaadagtar geatagtg ttggatga ttatccaga 120  
tttacctggg tcaactttat cagagagaaa tcagacacct ttgaatatc aaagagttga 180  
gtctaagact tcaaagagaa aaagactgtg tcatcaagag aattaggagt gacctggca 240  
gagagtttga aaacagcaag ttactgaat tctgcacatc tgaaggcatt actcatgagt 300  
tctctgcagc catcacacca caacaaaatg gcatagttga aaggaaaaat aggactttgc 360  
aagaagctgc tagggtcatg ctccatgcca aagaacttcc ctataatctc tgggctg 417

<210> 18289  
<211> 432  
<212> DNA  
<213> Glycine max

<400> 18289

ctctctttca tcttttgcca tatggaaaat agacattttt ttatcacctc taaaggttct 60  
aggagcagta aaatacttac tagttgttat caactacttc aacaagtgga ttgaaacaag 120  
accactgcgg gaaattatgg ccaatgaggt ggagaaattc acccggaac atctcatttg 180  
taggtacgac ctaccatgag ccattgtcat ggacaacaac actcaattca aagctcagac 240  
ttacaaagaa ttctgacat gactacgcat caagcaccaa gtcatctctt tcgaacatac 300  
tcagaccaac ggtcagacaa gggcagctaa cagagtcac ctcaggttcc tgtgtactac 360  
actcaacaag tctaagtgtc tatagaaaga taagttcttc agtatactct gggcgtagca 420  
ttgttcaccc aa 432

<210> 18290  
<211> 429  
<212> DNA  
<213> Glycine max



<400> 18290

taagctcttt caactgcaca aggetcttaa tatttgaata gtatccttgt ggaaccttca 60  
cggaggaag acactaaca aaacttatct tctccttctt ggacaaagta tggcaggctg 120  
agggcaata aattctctc caatcagacc ttatagaaa ctatgatct ataccatct 180  
tctatgctt tctcctt tctcctt tctcctt tctcctt tctcctt tctcctt  
tctcctt tctcctt tctcctt tctcctt tctcctt tctcctt tctcctt  
cgtcaagatc acaccaatc ggaagatcaa agaaaatgga cctcttcttc catatgcaac 240  
tttgactttt atcttctttt tgggtcttcc caaatacagt attcaggtgt tcaacccgct 420  
aatatacct 489

<210> 18291  
<211> 394  
<212> DNA  
<213> Glycine max

<400> 18291

agcttgtctt catttggtat tttattcacc cagtcttctg gctctacaca aggggtgtctg 60  
caaccttcta aaatagtatc tcttcatcc tattaatac aaaatgacaa tgttaaagtc 120  
tattcgtaaa aagatccctc caacaaaaac aagggataaa cagagaagga aggtaaatgc 180  
gagaagaaaa gaatgtagta attgtgaaaa caacaaatta agtaccaatg aagtgatgtc 240  
aggccttctg tagggagtag gacaactaga agccaaatca gcaaatctca actatagatt 300  
cctatccatg tacattcttt aaaaaaaatt catgggttagt ggggctctac taaatgttgt 360  
catgacaaga gtatattcat tagacatcaa aatg 394

<210> 18292  
<211> 430  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18292

ntntgactcc ttagtatttg gaacttgctt tctctctttt tcttttagcat catcaaaata 60  
atcttggagc tcatgtcttc cacaatatga ccaagaagtg cctatgctt cttagacaact 120  
caagaatcat gagaggaatt atccactca tgacctggag ttacgtgttg taattttgct 180

ccttaagatg tggaggcatt acctgtttgg ctccaagatt gaggtgttta gtgatcataa 240  
gagccttaag tacttgttta gtcagaaaaga gtgaacatg cgtcaaagga gatgggttga 300  
gtttcttaaa dattatgatt ttgagcttag ctgccatccc gccaaagcca atgtagtggc 360

<210> 18293  
<211> 357  
<212> DNA  
<213> Glycine max

<400> 18293

tctagcttta ctatgcaaag aatatccaag gaaaattcct tcctctgact tagcatcaaa 60  
cttctctaag ttttcttttc cattgtttta tagaaaaaac ttgcaaccaa aaacatgaag 120  
tatggagatg ttgggtttcc taccattgaa tagttcatat gaagtcttct ttaaaatggg 180  
tcttattaaa gccctattca tgatatagca tgcagtatta atggcttcag cccaaaaata 240  
ttttggaaga ggagtatcat ttaatt 265

<210> 18294  
<211> 357  
<212> DNA  
<213> Glycine max

<400> 18294

agcttttttag ttttcaagtg ccaattcgtc ctcttcttta gtccagtctt cttctggctt 60  
caattcatca gtgggctttc cttctgtgtc cagcatcttg ggatgttccc agcctttgat 120  
gacagctttc caggttctgc taccagtga ttgaggaag gccaccatc ttgttttcca 180  
gtattcatag ttgtttccat caagaattgg tggctgttcc actggctctc cttctttctc 240  
catgttccac agaatttata tcccagatc tcaactctgt atttcgagtg ttggtcttga 300  
taaccaattga aattctgata ccaggggaca gatgtcttac aggatgtcac gacatca 360

<210> 18295  
<211> 412  
<212> DNA  
<213> Glycine max

<213> unsure at all n locations

<400> 18295

ntatatacaa' attaaaaaat tattaaatag ccacaagtct agaaaaatat aattacattt 60  
gattaattta tttttttatt ttatgatat tatctctctt tttactttat agagatgtca 120  
aaaaataaa taaaaaaa tt taaaaa aataaaaaa aatgtcttt taaatgaga 180  
ttaaataatt tcatctaat taaaatgtat ttttaaaaa taaaatgaa agtggattat 240  
agaactacat atatacaaat attaaattta tttaaaattt aatatatcga tt 412

<210> 18296

<211> 337

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<410> 18296

agctttttatc caactgtaaa acttggcaat aacactagaa tggctgttgt gggaaaatgt 60  
atcattcgaa tgaagtga tggatttact caggcaattt ctggtgtcta ttatgttcct 120  
gaacttaaga gtaatttatt gagcataggg aaacttcaag aaaaaggctt gactattttg 180  
attcaacatg ggaagtgtag ggtatatcat ttgcaaaaag gattaattat gcagacagat 240  
atgagtggaa atataatgtt ttctttgttg gctaccatga taccaaaagc tttctcatgt 300  
ttccaaattg tatcagaaaa tgaatctcat ctttggc 337

<210> 18297

<211> 425

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 18297

tttactctct ggtaatcgat taccagagga tgtaattgtt taccagtggc caaatatggt 60  
ttataacagc tataaaaatt tgaattcgaa attttaaaag ctgtaatcga ttacacaatt 120  
atggttaatcg attaccagca gtagtaaac gtttaaatc aattttaaa agctgtaatc 180  
gattacacaa tttctgtaat caattaccag acagdaattt cagaaaaata atttcaagag 240

tcacaacttt tcaaaggctt tactcatgac caccaatggt ctatatatat gtgacttaaa 300  
cacgaaattg ctacagagatt ttgagaacaa caaagtgttt atccctctcaa aaagcaattt 360  
cattttatcc tcttaaagaa ttccctggcc aattcaattg caattcatta aggaattaat 420  
tagt 475

<210> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18298

ntggacctt gtactgtaca tataagactt tgattcttat tttaaagttta aaataatgat 60  
ttccaatatg aaggaattta gtaccgttag ttattatgat tattcttagt atttttttgt 120  
ttcaaaataa ttatcatctt ttattatctt atataaaaaa tattgcataa ataaaataga 180  
ataataattt tacaataa aaattatctt attattaata tataaagaat ataaataaaa 240  
gaagtaatta atgttacatt acaaattaaa atattaaaat gataattatt ttaagataat 300  
taagatatta aaatgataat tatattaaag ttgagctaaa acagttattt tcattttttt 360  
tctcaacata aatatgttta acatagataa ttttttactt ttaaggtttt agagcatctt 420  
cg 422

<210> 18299  
<211> 347  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18299

agcttatcac cactctctt cataccactg gccacaccac caadaacttc agcttcgtga 60  
atctcacttg cgaactccaa ttggcggtca tctcgatctt cttcccccga cgtactctc 120  
ttctaatgc cactctctt ttcttcataa agaagcgtga tggactaga aaaccactga 180  
gggcactac gctgaattt ctctcactg gtagggaac acgtttggtg ggcctaagct 240  
agttctcttg actctcactg aaccaccca tcttggaada aaagatctct gcagagctaa 300  
agtttgtctt tacttactt catggcggtg accgaagaca ctggaatg 347

<210> 18300  
 <211> 426  
 <212> DNA  
 <213> Glycine max

<400> 18300

actatattat ctacacaaag ggacaaattt tttatattt tttgagaggt gtttttata 120  
 aggactgaaa gaacttgctt gagatgtcct aagtgatcat ctaggctcct actgtacact 240  
 aaaatatcat caaaataaac aactacaaat atacttatga aatcccttaa gacatgatgc 300  
 ataagcctca taaaggtgct cgtgtcatta gtgagcccaa caggcattac tagccattca 360  
 tacaaaccaa acttggctctt gaaagcgggtt attcactcat caccctcttt catcctgatt 420  
 aggtga 426

<210> 18301  
 <211> 342  
 <212> DNA  
 <213> Glycine max

<400> 18301

tgacaaacaa agctaatcga agcaagtaat atataaaatc tattattttc acaaaatcaa 60  
 tagtgcaaaa ggcatttgaa atggtaatat cttttaatat tttatattca ttttcttata 120  
 agttatataa taataactca ttttttattt tgtgattgct tttatatgat atatgaaagg 180  
 ttgycgaaat ttataaaggc atcatgcatt gcattatatt atttaatttg ctctttacta 240  
 tatttaattt taacagacaa aagatccaat atctagtcaa tgatcagatg ctgcggaagt 300  
 ttggaaggcc acacacacga gatctaattg aacctgtgca tt 342

<210> 18302  
 <211> 423  
 <212> DNA  
 <213> Glycine max

<400> 18302

taaaagttat acttggttta tcaaatatat ttaatttgta tgtcaacctt cctgtaaaaa 60



cacaaaagtt gaatgcccat ttggaacttc tctgtagaa gatccattgt tcaaattttc 300  
 actagtgtga acaactgatg attgaatatt tgaagcctgt ccagaacctg ggccataac 360  
 agttttatga tagctgtctg 380

<210> Glycine max

<400> 18305

tcaagctttt ttaataagat ggcttcagca aattccttat ttccagatag gaattctatc 60  
 aatagacctc caatctttta tggagagggg taccactact ggaaaacctg aatgcaaatt 120  
 tttatcgagg caatagatct aaatatctgg gaagccatag aaatagggcc ttatatccc 180  
 accacagtag aaagagtctt aatagatggg agttcatca gtgaaagcat aaccatagaa 240  
 aaacctagag ataaatggtc tgaagaggat agaaaacgag tacaatacaa cttataagcc 300  
 aaaaacataa taacatatgc cctacgaatg gatgaatatt tcacggtttc aaattgtaag 360  
 agtgctaagg aaatgtggga cactc 385

<210> 18306

<211> 412

<212> DNA

<213> Glycine max

<400> 18306

tttcaagaga cctactcttt ttgactgttt tcaagagttg gtcttcttgg ttgaacactg 60  
 aacacaaggg accaatgttc cttgggttca ttgcaagaag caggatttgc ttcttggttg 120  
 atcattagac gcaaaagacc aatgtctttt gggttcattg caagaagtgg gtataatttc 180  
 ttgggtgtta tcaactggaca caagggacca actttccttg gggttcattg caagaagtgg 240  
 caataacttc ttgggttgaaa tcaactgaaca caaaggaggg aagtcctttg ttggttcattg 300  
 ctgcacaaag attttacaag gttagtggaa atctcaagcg aattgcttga ggactggacg 360  
 tatgcacggg ttgttggtga actagtataa atcgggatat gaattctctc tt 412

<210> 18307

<211> 366

<212> DNA  
<213> Glycine max

<400> 18307

agcttggttag ttttttaggc ttgagttctt aacttatcca gctcattcaa ttgttgctac 60  
ttgttgctac ttttttaggc ttgagttctt aacttatcca gctcattcaa ttgttgctac 120  
ttgttgctac ttttttaggc ttgagttctt aacttatcca gctcattcaa ttgttgctac 180  
ttgttgctac ttttttaggc ttgagttctt aacttatcca gctcattcaa ttgttgctac 240  
ttgttgctac ttttttaggc ttgagttctt aacttatcca gctcattcaa ttgttgctac 300  
caattctttc tagatgctct cacagttttc tgtaagacct tctttagtta cctattagat 360  
acctcaactt aaccaattgc ttgaggggtga taaagagtaa taaccttatg ggtaacacca 363  
tatttta 366

<210> 18308  
<211> 427  
<212> DNA  
<213> Glycine max

<400> 18308

atgtagccca atcttctctt taagtaggta cggcgctttc tagtactttc ttgatctccc 60  
tagtctaaac tccaaacttt ccatttgttt acggatgata aggtgatgct actttgtgtc 120  
aaacatcata gtgttgaaag acctttgaga attgagcaat acaaaagtgt gtaccttcat 180  
cactaatcaa gagtctaggc aatcaaaacc taacaaaaat gtttctcttt aagatattaa 240  
tcattcatctt tacatcattg gttggactag aaatttcttc caccactttt aagacatagt 300  
gcactactac caagatatat ctgttgccac gtgaggatgg taagggacca aaaaaatcaa 360  
ttcctaaca atcaaacact tctacctctt gcatgttctg taatggcatt tcattgtctc 420  
tagatat 427

<210> 18309  
<211> 293  
<212> DNA  
<213> Glycine max

<400> 18309

ttgatcttta gtttctcttc caaccagca cggtttcgat gccgaacct gctggatcgg 60  
agtcgaagc aagaagccga tgcacctgca tgaaggagtt aacgcccacg gcttcgtctg 120



gattcacctg cagcateccac ggcttcacgt cttcaaggcg ccacgcgcgc acgccacgaa 180  
 atgcaaacct aacattcacg gaccgggcca gctcagcgag cctgagccca atttcgcgga 240  
 gcgtgtcgcg gttgtcggac gagggaagcc caattcccgt gagcctcaac agc 293

<213> Glycine max

<223> unsure at all n locations  
 <400> 18310

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 accacctagc atatttttgt tctcaagttc atgcaatcct ctttcactaa catgacctaa 120  
 tctcaaatgc caaagttttg ttttatcaat caatgtatta ctagttaacc atgcatttcc 180  
 aacaatcgtg gaaccttcaa gaataagcaa gccattactt ttattcttgt cacccttggc 240  
 aatgattaaa gatccatttg aaatcttaag aacaccattt aaaattctag ttgaatatcc 300  
 tagatcatca cacatgttta tgaaaataag atttcttttg agttctggaa tgtaccttac 360  
 attnttcagt agatactctc tattatcaaa catcttcaat ctcacag 407

<210> 18311  
 <211> 381  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18311

agctttatta attagatggc ctcagcaaatt tctttatttc cagaagggaa ttctatcaat 60  
 agacctccaa tctttaatgg agagggttac cactactgga aaaccggaat gcaaattttt 120  
 attgaggcaa tagatctaaa tatctgggaa gccatagaaa tagggcctta tatacccacc 180  
 anagtagaaa gagtttcaat agatggtagt tcatcaagtg aaagcataac catagaaaaa 240  
 cctatagata gatgggtctga agaggataga anacgagtag aatacaactt aaaagccaaa 300  
 aacataataa catctgcctt gggaaatggat gaatatctca nggtatcaaa tctgaagagt 360  
 gctaangaga tctgggacac t 381

<210> 18312  
 <211> 444  
 <212> DNA  
 <213> Glycine max  
 <23> unsure at all n locations  
 <400> 18312

aacatataatt tgaacaaata acaacacatt gattacttgc ttaataaada atgttaatac 180  
 aacttgggtct ctagtgaag attgctcaag tagaaaactg ctcaatctat caaaccatga 240  
 ccttgggttct tctttcaaac catacttttt cagtctatag acatgggttag gatgctagta 300  
 gtccacanaa cctgggtggat gatctacata aactttctct tcaatgagac cattaaagaa 360  
 gatacacttc acatccacct gagtaagtct aacatccatg atacatgcac atgcaagcag 420  
 caatcttatg tcatgttagct catg 444

<210> 18313  
 <211> 463  
 <212> DNA  
 <213> Glycine max  
 <400> 18313

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 attaaacctt ggcgcaatct tgaacaaatg gagtatgcta tgcagttctt gatgggggtg 120  
 aacgaatcct tctctactat tagagggtcaa attttatcca tggatccctt ttcctcagta 180  
 actaatgttc tttccttagt tcaagaagaa aagcaaaagg aagttgggtgc ttcctcctct 240  
 gctagtgaag tttcacatgc ttttgccctg aagccttctt ctgctgcacg caatcatcct 300  
 accaatcgct tcaaaaggatc ttccaagaat cgcctcttgt gtgctcattg cggatgctg 360  
 gatcatactc aggatcggtg ctccaagttg catggctatc ctccaaatta taagaggact 420  
 agttgttctt cacaagtcaa gatacattct tcatcttctg aat 463

<210> 18314  
 <211> 467  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
<400> 18314

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taacatataa tatcgattca tggtaggga ttatatatga ttacttattt cacatatact 120  
tatttatatg tggtagggaatt gggtagggaatt gggtagggaatt gggtagggaatt  
gggtagggaatt gggtagggaatt gggtagggaatt gggtagggaatt gggtagggaatt  
ggaaggaagt ggaaggaagt ggaaggaagt ggaaggaagt ggaaggaagt ggaaggaagt  
gaaggaagta actggaggtg caaagccagc agtgggaaga tctgaagac gaggaagaag 180  
atgggaaaag ggtacgagca tcttctctct cactgantta ggaagagaca ctgcgtcttc 420  
agtgaatca ccacaccat atgtgggggg aagactatct ggtatgg 467

<210> 18315  
<211> 457  
<212> DNA  
<213> Glycine max

<400> 18315

tatcttgatt gaatgtagca gcaaacttga cgatatttct aatttttcat ttctgcaaag 60  
gactcatcca gctttgacat tatagtgttt gtcttattgc cattaaatct tacaggaatg 120  
tctttttcca taatcaaggt tttagagtta tacactctat atgccttgga taattgagag 180  
tatccaagta agattccata atcacatttg gagtcaaact cttcaaagtt atccttggtg 240  
ttcaaaatga aacgttgaca tccaaatggg tggaaataag aaatattagg cttacgttcc 300  
tttcacaatt aatagggagt cttctttaag attgacctaa tatagactct gttatgtaaa 360  
aaacaaacag tgtgatcgag gccgtaccgc aatcatataa acatgataat gcagtaacta 420  
ggaagtgatc ctatgtcgtt tcccaacgag cagtgc 457

<210> 18316  
<211> 470  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18316

ttacttcgga tgcgcgattc anggcataa tatatctat atgttttata attgaacaat 60

ggaagctctt gagcaattca aatgggcata acttttctact aagatgtccg attcaggcac 120  
 ataatatatc gagacyttcg aaattaaaca atggaagctc ttgagcaatt ccaatgatca 180  
 taattttctc ctaggatgtc cgattcaggc gcataatata tcgagacytt cgaaattgaa 240  
 caatcaaaata tctttagcaa tcaaaatggt caaaactttt caattatctt tctgatttca

<210> 18317  
 <211> 386  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 18317

aactgtgcag caaagtcaaa ctgcttctac agaaactaaa agccttggag aattctatgc 60  
 cagctcaacc ttctgaacaa caagtcaagg agctcaagaa aaccaagct gacctttggg 120  
 aaaaagctac tatgcatgag tctattgtga ggcaaaaatc aagatgcaga tggatcaaag 180  
 agggggacag caacacagcc tattttcata gagttattaa tttgaggagg aggagaaatg 240  
 ctttgagggg gatgcagata ggtgacacct gngtggaaaa tctaactatt atcaaggctg 300  
 aaaacctgca ccattttcac aacacggtca atgacactca ctcgagctga cctaacctgg 360  
 atggggttgc atttaaaact ctgact 386

<210> 18318  
 <211> 424  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 18318

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 ttacaatcaa cagaagaaac agtatattata caagotggag aagacacagc agagcagaac 120  
 tgaagatggt gaaactggta caagccatca gatccaacat ctcttgaag aaggattctt 180  
 ttgaaatcct tatatttaac aaagcaacga ttagcatgaa actcaagaa aacatgatta 240

tctttggcaa atttgcttac actaattaga ttcttagtga ttgaggaac aagaagcatg 300  
 tttttaagaa taagttggcc attaggactg aaaggagaaa caaaattgga attaccaggg 360  
 gctgagafar tcagacottg tccgttacca atnttgatct gatctggacc ctcaaattgga 420  
 caar

<210> DNA  
 <213> Glycine max

<400> 18319

gggggcanga catgctaatt gacccaaagg aggggtattgt accgatgacg ttgatcatgt 60  
 acgttctatc attagtacac tccaccacat agttactccc aataccaaaa ttatttaattg 120  
 ttaaccagat gacccaacca atacatactg gcaataccat gactactatg tggcatgata 180  
 atagcttc 188

<210> 18320  
 <211> 431  
 <212> DNA  
 <213> Glycine max

<400> 18320

tgytaacatga ctgcttttct tatatataat caccaaacia aagattgcc aagtatctc 60  
 ccaccaaccc cgaagatcaa atctcact cctccgttt caaaatacat gtccattttt 120  
 gaaaaattgc ggtaaccaag gacaggctaa ttgacacaa aagttcctat tttaccctag 180  
 tcttttatgt tctccattat atatttatct atcccacctc ataattactc ccaataccaa 240  
 aattaattaa agttaatcaa attacaatac caatacatac tggcaatacc aatactacta 300  
 aatggcacta tttttgcttc ggtattgaaa agctcaattg gcatagttcg gttatcatag 360  
 tttgttaaaa ctcaattgaa ataactccc tccattatta attatactct aatcttacia 420  
 tgtttgtggac a 431

<210> 18321  
 <211> 326  
 <212> DNA  
 <213> Glycine max

<400> 18321

tacatagaag accgactgaa ccatgagatc cacttcaacc acacgctaac ttctctgac 60  
tattcagcaa cagatagcag cctgcattga ggatttactt tactctatta tggcacactc 120  
ctcaagctca tcatcagaa cctgctctct cctgcagaca tactcttctt cctctcctac  
tccaacgaga gaccctactt gcaatc 326

<210> 18322

<211> 440

<212> DNA

<213> Glycine max

<400> 18322

tggagactga agagcgtgcg agtctttatc tgtgggaggg agaagagAAC aatccaaaat 60  
caattgtacc ctccaagttag cgaagaattc tgtttgcggc tgtagatga ggagaggttag 120  
gagcctccgt aaagcgacac acaacttcca ccgcataatg aatatcgggc cttgtattgg 180  
ttagatacct taaactcccc acaagactct tgaagaccat ggagtctacc ttctctctct 240  
catcaaactt tgataacttc aagccactt ccataggtgt gttcacggga ttgcaatcaa 300  
gcatactaaa ttctctcaac acttcttttg ttagcttcc ttgtgagaca aagataccat 360  
tctccatttg ctccacttcc attcccaagt tatatgacat ggtcccata tctatcatat 420  
caaattcacg agacatggac 440

<210> 18323

<211> 444

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 18323

catgagaagt ggggtgaatt cctagagtta ttcccttatg ttatcaaaca taaaaaggga 60  
taaggtaata tggtagccga tgccttttct cgggtgcatg cattacttct tatgcttgaa 120  
acaaaattga ttgctcttga atctttgaaa accatctatg aaaatctatga aacttttggg 180  
gaaattttta aaaattgtga aatttttcca gaaaatgggt tcttttagaca tgaaggcttt 240

cttttcaaag aaaacaaatt gtgtgtgect aaatgttcta ctagaaattt gcttgtttgt 300  
gaagcacatg aaggagggtt taatgggtgca tttnnggtcc aaaagactct agaaaacatta 360  
caagaaacat tttattggcc tcatatgaca aaggatgtgc agaaattttg tgaacattgc 420  
... ..

<210> 18324  
<211> 398  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18324

tataanaagt ataataaatt aaaaaaaata aaatnaatac tcatattaat actatgtttg 60  
catcaaatat tcaaatgaac atttagatgt aatgataaaa ggggtgtgcat cttattttcaa 120  
ggatcatagt tctactccta atttcttctt aaagcattct ttttaagtaag gcttattaac 180  
atatgattaa ataattttt agggaaattta atggtttaat tcatattcaa atattttcat 240  
aaccattaat taattattaa ttctgacatt tattttaaca aagaaattat tatttttgaa 300  
tattttaatt tgaaaaaata ttctttggaa atattatttt atttacgtac tcaagtttgt 360  
ttgaaatata tgattaggta atattattct atcgctattg acataattta cagaanatgt 420  
tacaataaaa aagtgtgtga ggaatatatg aaatttgttt aa 462

<210> 18325  
<211> 398  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18325

gtacttcggg cgtgtattat agagcaacac ggtagctgga tggattgttt gccattgatt 60  
gagtttactt aaacaatatg ctaccaagcc agtatttgga ttgctccttt tgaagcttta 120  
tatggacgaa agtgcaaaac tctattttgt ttgtacgatg atggagaagc agtacttctt 180  
gjaatggaaa tgcataaaca gattaacgaa caagtgaagt tgatttcaga gaagataaaa 240  
atctctagg ataggttaga gagttattat gatagaagga ggaacacact agattttcag 300  
gaaggagaac atgttgtttt gaaggttctt tccgtaaccg gngtcggaag auctctcaag 360

gctangaagt tgacacccaa gtatctaggt cegtatca

398

<210> 18326  
<211> 460  
<212> DNA  
<213> Glycine max

gaatgaatg caatcttat gctgaatgga ttcttttaaa tctgaatgga ttcttttaaa  
caatcttat aaaacaagtc atgtcccat tttttaacta ttatagaat ctatcaccac 120  
ctccaaacta ccaataacat aaaaactagg gttacotctt gtgagtagag aggtgtgtct 180  
attgtataaa acaatttaac tcaaacagtt caaagttatt atcagagtca accaaagaaa 240  
attttctatg actcttatct aaactatcat caaatacaag aaaagatggt ttacgttatg 300  
acatttttca taattaaaag attaaaagtt gtcaccacat ctatatagtg acaaactttg 360  
gattgatcac ttatcatcac taatatgcaa gtcactgttg tattagtgat gaatatttta 420  
gatgtcataa aaatatatat tgtgatggaa atgttgtcac 460

<210> 18327  
<211> 467  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18327

tctgccttat tntctataa atagggggag aagtgaattt gtttaaatgt tcagctctcc 60  
tggtaattcg agatcacttg aaattagtga aaaaaattgt ttccgtgaag aaaatccaag 120  
ccgaggcatt tccataacgt ttcgtagcgt ttccgtggg taatttcacg aagattttca 180  
aacgtttctt gacgtttctt gttcgttctt cgtcgttctt cgggtcttcaa ccggttaagtt 240  
cccgaaatcg aacttttcaa ttcattctat gtaccattag tggctctcat ttgttatcca 300  
tggctctcta tgggtgtgag cttctcttag actcatcttc tcttgaagt ggcgtctct 360  
ctctctcttc cttctccatt ccgtgcctat tcatcttcca agaagcaaaag gaatccattg 420  
atgaagaaga tcttaggctt acaagctcca atggagotta caacacg 460

<210> 18328



<211> 465  
 <112> DNA  
 <113> Glycine max  
  
 <223> unsure at all n locations  
 <400> 18328

aatcaaga ccaatcaat caataatca caaagatga aatcaatca  
 agacatctca catgacatct gctttctgtt ttgtctccc ctgtctcat gcttactgca 24  
 acatcttctca taagctacta gctttctcca ggatgtcaag acgtctcttg tgacatcaga 300  
 tatctgtctc cctgtctctc atgtctttac tgcagcatct tataatanct tccatcagtc 360  
 atcatcagea gcagcagttct cccctcana atcgtatata tacaactecn cctcanaatc 420  
 atgaatcatg catacatctg atctactgc catacatcat acata 465

<210> 18329  
 <211> 455  
 <112> DNA  
 <113> Glycine max  
  
 <223> unsure at all n locations  
 <400> 18329

agaacatgat gcccaaaagc acgtcggtta tattacctn taatgcttcc catctaaggc 60  
 caagttccat ggtggaccgt gccttcgacg gcacccgccg ggaggtgagg ggggagatcg 120  
 acctcccagt acagataggg cctcacacct gccaggttac attccaagtg atggatatca 180  
 agccgacctc caactatctt ttggggcgct catggatcca ctcatggga taatacagcc 240  
 aattacgctc tgccttctct catggacggg ttctttggct acaatcagat aaagatggcg 300  
 ccagaggata tggaaaagac cacttcgctc acctgtggg ggatgttctg ctataaagtg 360  
 atgtcgtttg ggctcaagaa cgcgggggca acctatcage ggcctatgat ggcctgagtc 420  
 atcgacatga tgcaccgaga aatcgaagtc tatgt 455

<210> 18330  
 <211> 435  
 <112> DNA  
 <113> Glycine max

<223>        unsure at all n locations  
 <400>        18330

ntaagagcaa ttcttttctt tnncttatta ttctcattat gttgattcaa nncattagt    60  
 ttcatttcat gttcctgtaa ctttccaaat aaagtagcaa gagacatgtt agatagatct    120  
 tttctttaa tttcttctgt tttcttctgt tttcttctgt tttcttctgt tttcttctgt    180  
 tttcttctgt tttcttctgt tttcttctgt tttcttctgt tttcttctgt tttcttctgt    240  
 tttcttctgt tttcttctgt tttcttctgt tttcttctgt tttcttctgt tttcttctgt    300  
 tttcttctgt tttcttctgt tttcttctgt tttcttctgt tttcttctgt tttcttctgt    360  
 tttcttctgt tttcttctgt tttcttctgt tttcttctgt tttcttctgt tttcttctgt    420  
 tttcttctgt tttcttctgt tttcttctgt tttcttctgt tttcttctgt tttcttctgt    480

<210>        18331  
 <211>        399  
 <212>        DNA  
 <213>        Glycine max

<223>        unsure at all n locations  
 <400>        18331

agtttaagga ggagtatggt tagtaacaca taattttaca tatttttgatt ggtgggaggg    60  
 gttagaattg gtctctatat taacagttct gtattttctt gtaggaattg agccctggac    120  
 ttttactcag aagttaggag atgctgtttt cattccagct ggttgcctc accaagtcag    180  
 aaatctgaag gtaaagtga cttacctggt gaatttggtt catatttatt gtaggcacaa    240  
 tatattgttt tcttagaagt gtaggcataa tagtatcttt ggctactacc tgaaattaag    300  
 cctatgtcct tcattagcaa agcaagcctt ttagaaaagt gaaaactgtt gattcatcta    360  
 naagtttcag ttcacttggt tattntttaa cacatttga    420

<210>        18332  
 <211>        429  
 <212>        DNA  
 <213>        Glycine max

<223>        unsure at all n locations  
 <400>        18332

ttcattgccc atagaggaca actcttctta atacttttca accaccattt atcttccctta    60  
 ttgattgctt cagtatctca aaaaagccta cgtatgcttg gaagaacctt tgacctgttt    120

tctcaaatct tccaaagtgt attggcattt ctatgaccca tatatgttac agttacccaaa 180  
aaggttcaaa gagaaaacca aatgggtgtgg aatagtaagc cccgggtggg caccatagtt 240  
gaaggtattg agccacaagg caqttgggtg gggtttgact cactctgggt ggacctctgt 300  
actctcagtt atttctcatt tttttttt tttttttt tttttttt tttttttt 360  
tttttttt tttttttt tttttttt tttttttt tttttttt tttttttt 420  
adwlygato

<210> 18333  
<211> 400  
<212> DNA  
<213> Glycine max  
<213> unsure at all n locations  
<400> 18333

aggttgtttg caggaattta atttaataac ttacttttta caaattattt taagtatctt 60  
gtgaaaataa gttacttaaa ataaattata tgttataagt tttttttcaa tttcattgtt 120  
cactaatcta ttgaaactt ctttttcttc ttttacttaa ttttaaaaaa aaattattat 180  
ttcaacattc ttacaaacac ttggaattaa tcttttatgt catttgatat ttatcaetta 240  
acttatcaat taatcttact aaatactttt aattaaataa gttagtttat aaacttttag 300  
ctattcaact cctaagttat agcttataat aggggtgttc gtgagccagt tccggaccag 360  
ttttgaccaa atttangato taacctaatc acaattgato 400

<210> 18334  
<211> 441  
<212> DNA  
<213> Glycine max  
<213> unsure at all n locations  
<400> 18334

tgaaggtgag taccacacca ttttttcata gcaaattatt gattatgtgt ttactatcat 60  
agctatcatt tttttctcgg ttattgaggg aaccacttgg gctgcdaaat cctccacact 120  
ttgggcgtat tttttgaaag atccatgcgc cctctttcat atgctctgta gtgcatect 180  
atccggagcc atatcagaa ttacttaata ctccctaaac aagtcaccca ttacgtctt 240  
ccaagaatgg actcgggaag gtcccaagtt aatgtaccag gtaacagcta cccagtaag 300

actttcttgg aagaaatgta tcaccagttc ctcatctttt gtgtatgcc acatcttccg 360  
 acaatacacc tttagatggg ttttggggca agtagctccc ttgtacttat caaagtctgg 420  
 caccttgaac ttgtgatggg t 441

<210> Glycine max

<223> unsure at all n. locations  
 <400> 18335

ntaagagcaa ttctttcttt tntcttatca ttctctttat gtatattcaa tctcattagt 60  
 tccatttcac gtctctgtaa ctttccaaat aaagtagcaa gagacatgtt agatagatct 120  
 catgattcaa taatgggttg taccttgggt tgtcattccc tacttaagca tctcaaaact 180  
 ttattgataa gatcttcatt tgaaaatatt tttcttaaag atgcaagatg attaatatg 240  
 tgtgtgaac tcttttgcac gtctgtttg ctttcattag gattcattct aaataattca 300  
 tattcatgag ttaatgtatt taccctagat cttctacat ttgttgtacc ttcattgtct 360  
 acttgtcggg taccacacat atcttttaca cttttacaat ttgatccct acagtgttta 420  
 ttcattccta aaacagatgt aat 443

<210> 18336  
 <211> 406  
 <212> DNA  
 <213> Glycine max  
 <400> 18336

agcttcaaca ttcaacttcg agcttctctg tatattatag gactcaatta gacatccgag 60  
 taaaaagtta ttgtcgtttg aatttgcctc gagcttcaac attcaatttc gagcgtctcc 120  
 atatattacg ggactcaac agacatccga gtaaaacggt attgttgttt gaatttgcct 180  
 aaagcttcaa cattcaattt cgagcgtcta gatatttac aggactcaat caaacatccg 240  
 agtaaaatgt tactgtcgtt taaatttgcct tagctctcca gctttaaatt ccgagcgtct 300  
 cgataatca cggactata ccagacatcc gagtaaaaag ttattgtcat ttgaatttgc 360  
 tttagatctt aacattcctc ttgaatttgc tcttatatt acgaga 420



<223>        unsure at all n locations  
 <400>        18339

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tctaatagta tatcaaaaaga gagaaatggt agcaactttc tcttttaaca cttttttgaa   60
catcttttct agttcttact atgaaattta tcaaaaatca caaaattttt gcaattctta   120
tcttttttct tcttttttct tcttttttct tcttttttct tcttttttct tcttttttct   180
tcttttttct tcttttttct tcttttttct tcttttttct tcttttttct tcttttttct   240
attatgtaca taagctgaaa ggcctgctca atgaaattta cagttgtcac caagagatta   300
tcaggtgata taaggagtgt gccataccac aagcagatca tgcagttcaa gagagaataa   360
atatatggca acccggagaa catatctgtt gaccatttct ggatgattct cctaaatgtc   420
ggcttcaaaa tcaaaacaga ac                                         442
```

<210>        18340  
 <211>        248  
 <212>        DNA  
 <213>        Glycine max

<400>        18340

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agcttgtgat tataaaggca aatttttact gtgatttttt ctctctgttt cttctttctgg   60
ccatgaaact tctcttttgc acttggttga tgagccccac ttaaaaagtt tgaattttga   120
ggagaattat ctttctgggt gtttttccag agagcaagat cttgaagttc ttgggggttta   180
tgtggaatcc tctgtcttgg gttatggacg ctgctgctat aatggcaatt gcacttgccc   240
ttggaggg                                         248
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<.10>        18341  
 <.11>        436  
 <.12>        DNA  
 <.13>        Glycine max

<223>        unsure at all n locations  
 <400>        18341

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cttgcttgaa gcatactgca aaaatgggag aaaattacat atatttttgc aaccatttaa   60
ggagaaatta aacaatgac atatatatac ctgatgacat ggttatgaa ctcagcggta   120
atcttcattg ggcttgggtt gtaagcttct ttctctctct cttcttcttc ttttaattgc   180
ctatgccaga catgatcgaa gtagctatg ttagcgttaa gggtatggaa tataaccaaga   240
```

caaattacgt aaaagaatag caaactgaac ttgctagttt ccatgactat tgtttctttc 300  
 tcttgaagat ctttaatcgt gtgggcctta tgttgtttat tgtgtgcttt tcaacatata 360  
 tatntattta ttttggcatt ttaagttctc ctcccgtaact ttgcgctaga cccacatata 420  
 ...

<210> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18342

acactatgga aaactccgc ttgccttgcc ccttgatata ttngagggac ttatggatac 60  
 tatgaatgac aaattccttg ggataaaggt attgttgcca tgttttcaaa gcccgtaacta 120  
 aggcatacaa ctctttatca taagttgaat agttaagggt aggaccaatt aacttttcac 180  
 taaaataagc aattggatgg ccttcttgca tcaacacagc cccaatccca acatttgaag 240  
 catcacactc aatttcaaaa gatttttgaa agtttgcaa cgcaagtatg ggggcattag 300  
 ttagcttttg cttaagaaca ttgaaagctt cttcttgttt ctctcccat ttgaaaccaa 360  
 catttttctt gagcacttca ttgagaggtg ctgccaatgt gctaaaatcc ttcacaaatc 420  
 gtctataaaa acttgctaag ccatgaaaac tcttcacctc ggg 463

<210> 18343  
 <211> 379  
 <212> DNA  
 <213> Glycine max

<400> 18343

agcttgtctt caacaaataa atcataatca aatttgtgat cttcaaagcc caactccagc 60  
 ttctttctcc ccatatccac tatgcagctc gcagtttagca tgaatggcct tcccaatatt 120  
 acaggaatgt cattatcttc acagatatec attaccacag agtctgcttg tttactctg 180  
 accagcacat ctccaattac tccatatggc ctggaaatgg agcgggcaac aagttgtaaa 240  
 gtcatectag tgagcatgat ctctactct cccaaccttt tgcacatgga gagtggcata 300  
 tagctaatac ttgctcccat ctcaataaaa gcctttccac agtgaactct tcaatgaat 360

aaggaatggt tacactccc

379

<210> 18344  
<211> 373  
<212> DNA  
<213> Glycine max

ctctatattt cagatggga atccctctaa taccactttt gtaagatgatt tctctcagga 11  
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atagacatgt ggaggagtaa ctggtttctt gaggtgtcca taggtaacag ttgtcctttg 240  
aactgtgtgc cttcattaga acttcactct tctcatttgt caccaagcat tctgactttg 300  
tgaagtttac attatattct tcatcacaca gctgactgat gctgatcaag tctgcagtca 360  
gtccttcaca gcagtact 373

<210> 18345  
<211> 437  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18345

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agacgaagac ataattcata taattgactt ccatattgat gaaggaagcc agtggctcac 180  
ttagattcag gattttgtag ctaggtctag ggggccactc cacatccgga ttacggctat 240  
tgggtgattca acatcatctg atgcaatgca gatgggtggga aataagttat caaaacttgc 300  
tgaggaattt aagggtgtct ntgaatttga tgttgtagct atcttttgctt gtgatgttca 360  
gctacaaaac cttcgagttc aatctcgggt ggctctggct gtgatatttg cattcatgct 420  
acatcagatg ccggatg 437

<210> 18346  
<211> 401  
<212> DNA  
<213> Glycine max



agctttcttca taaacgtgac atttttgcac aatacacaat gtccgggtaca ccacaaccaa 60  
atggtgtatc agaaaggcac aatagaactt taatggatat gathaggagt atgttaatra 120  
cttggatgac atgtgtatc attttgtatc attttgtatc attttgtatc attttgtatc 180  
cttggatgac atgtgtatc attttgtatc attttgtatc attttgtatc attttgtatc 240  
cttggatgac atgtgtatc attttgtatc attttgtatc attttgtatc attttgtatc 300  
cttggatgac atgtgtatc attttgtatc attttgtatc attttgtatc attttgtatc 360  
caaaggagta taagtattat tgtcctaacc atagtatgag a 401

18347

cgcttagcat cagaccactt ccagggtact ggaactactt cacatggact tgatggggcc	60
tatgcaagtt gaaagccttg gaggaaagag gtatgcctat gttgttgcg atgatttctc	120
cagatttacc tgggtcaact ttatcagaga gaaatcagac acctttgaag tattcaaaga	180
gttgagtcta agacttcaaa gagaaaaaga ctgtgtcacc aagagaatta ggagtgatca	240
tggcagagag ttgaaaaca gcagggttac tgaattctgc acatctgaag gcattactca	300
tgagttctct gcagccatta caccacaaca aaatggcata gttgaaagga aaaacacgac	360
cttgcaagag gctgctangg tcatgcttca tgccaaagaa ctccctata atctctgggc	420
tgaagccatg aacacagcat gctacatcca	450

4307 18348

agcttctaaa cttttattta gaatgaagct ctgataccac ttttttagaa agtgggctca 60

taaaatttaa gaaggggggg ctgtgaattaa gaatacccaa attactttcc acaattaaaa 120

atttatttca ctttcttttc aagttataga ttcccttaac aatgaacttc ttaaataatta 180  
 attcaataa aacaatttga atatgaatgt aaagcaataa taaacaaagg aggttaaggg 240  
 aagagaaagt gcaaactcag atttatattg gtccggccac acccttgtgc ctacgtccag 300  
 tcccaadga agcctttga agctctact atctctaaa ttcccttaac aatctctaa 360

<210> 18349  
 <211> 180  
 <212> DNA  
 <213> Glycine max  
 <400> 18349

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 ggccataact ttttaactcgg atgtccaatt catgggcac acatatagag acgctaaaaa 120  
 atgaacaacg gaagctctcc agaagttaaa atgggtattaa gttttcacac tgagggtccga 180  
 ttcaggctta taatatatcg gggcgctcga cattgaacaa cggaagctct tgagagattc 240  
 aaatagtcac aacgtttaac tctgatgtac gattcatgcg cattacatat atagacgcta 300  
 aaaaatgac aacagaagct cttagaat ataatgggc acaagttttg acaactg 356

<210> 18350  
 <211> 375  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18350

agcttattaa ttnttgtaat taggttttta gtttgaagtt attttaataa tgcttaatta 60  
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 gttttatgaa gttagaatga aattttaate tctagtttaa gtttaagttt aagttagtag 180  
 ataaataaaa ctgggtaatt ttgaatatat totatagata aattaaaata catgtgaaga 240  
 aaaattttaa taaataattt tttttctac aactaacaaa taaataatta aataaatat 300  
 ggaactaaca attatttata atacaaacaa atattgaaaa aattatttac acaatatata 360  
 taaataata ataat 375

<110> 18351  
 <111> 355  
 <112> DNA  
 <113> Glycine max

<400> 18351

gagagatgac gacagagatgac gacagagatgac gacagagatgac gacagagatgac  
 gacagagatgac gacagagatgac gacagagatgac gacagagatgac gacagagatgac  
 gacagagatgac gacagagatgac gacagagatgac gacagagatgac gacagagatgac 1-  
 gaaaaataacc ttatactctct tacataatccc ttggcraaaa ctctcttgat tcaataagga 240  
 attatctgag tgcacacac gctcaatcta tctctttata cagagatttc ttctctctct 300  
 ctccattctg aaaagggatt atagagaccg atggctctct gttgtgaaag gattc 355

<210> 18352  
 <211> 433  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18352

ttgaagagan agcaccacagt tatgatcttt ttgtgttctt tgaaaaagcc tatgacactg 60  
 tatectgggc cttcttggat tatatgctat ctaagttagg tttctgtact aaatggagac 120  
 aatggattgc tgccctgtct caatcagcat ctttttccat cttagttaat ggtagcccta 180  
 ctaaagaatt tgccctact cgtgggttga gacaagggga ccccttagcg ccattgcttt 240  
 tcaatatagt gggggagggt ctcactggtt tgatgagaga ggccattctg aaaaatctct 300  
 atcgnagcta ccattgtggg aatcataagg agcctattaa tatecttcaa tatgctgatg 360  
 ataactgttc tattgcgga gcttcttggg agaatgtcct tgccatgaag gcaatgctta 420  
 aaggttttga gat 433

<210> 18353  
 <211> 382  
 <212> DNA  
 <213> Glycine max

<400> 18353

ttcttggtt caattcttca ggggcttct cttctgtgtc cagcactctg agatgttccc 60

agcctttgat gacagctttc caggttctgc tatccagtga tttgaggaag gccaccattc 120  
 ttgctttcca atattcatag ttgcttccat cgagaattgg tggctctgtc actgggtccg 180  
 cttctttctc catgttccatc agaatttata tccctagatc tcaactctgtg attctgagtg 240  
 ttgctctcga taccgaattga aattcttata ccaagcagaa catctctgtc aggaatgtga 300

<210> 18354  
 <211> 448  
 <212> DNA  
 <213> Glycine max

<400> 18354

tcaagcttgc actgcccaaa gtggacaacc ttccagaaaa cgttgaagct ttcattgttg 60  
 tcccttatga tggcgttcag tatctcaaaa aagcctacga tgatttggaa gaacccttga 120  
 cctgttttct caaatcttcc aaagttgatt ggcatttcta tgacctatat atgttacagt 180  
 taccaaaaag gttcaaaagag aaaaccaaatt ggtgtggaat agtaagcccc ggttgggcac 240  
 catagttgaa ggtattgagc cacaaggcag ttggtggggg tttgactcac tctggttga 300  
 cctctgtggt ggaggttgtt tagaatgaaa aacctctagt tttgttaatg tttcttgcag 360  
 accacggatt gaactcgagg gtgttggaag tgaagaagat ggggtattca attcctaagg 420  
 atgaacaaga tggatcattc acgagtga 448

<210> 18355  
 <211> 444  
 <212> DNA  
 <213> Glycine max

<400> 18355

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 cccttccatg tagcaacctg gagcaaaaga gcagcccgaa gcttatgttg caaacattta 180  
 caatagacct cctcaacctc agcagcaaaa tcaacctaaa cagaacaatt atgaacctct 240  
 cagcaacaga tacaacctg gatggaggaa tcaacctaat ctcagatugt ctgacctca 300

gcaacaacaa cagcagcctg ctcttctctt caaaaatgtt gttggcccaa gcataccata 360  
cattttctcca ccaatccaac aacagcaaca gccctagaaa cagccaacag ttgaggctcc 420  
tcacacaacct tccctogaag aact 444

agttttgcat accccattga tccattagga aattacttat gaaagagagc catgaggggtg 60  
ggctcatggg ccactttggg atagacaaga cccttgtctt actcaaagaa aagttttatt 120  
ggcccatat gaagaaagat gtccataagc attgcactat gtgtgtgggt tgtttacaag 180  
ccaagtctag ggtgatgcct catgggctat acacaccttt acccatccca tctgcacctt 240  
gtgtagacat tagtatggac tctgtccttg ggcttcctag atcccaaaga ggtgtagact 300  
ctatctttgt ggtgggtggat aggtttctgca tgatggcaca ctctatacta tgccataccg 360  
tggatgatgc ttccacatct caaac 385

<210> 18357  
<211> 399  
<212> DNA  
<213> Glycine max

<400> 18357  
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accatggcat catttatggc gctaaattgc tgggagttgg aagccatctt ctcaatcaag 120  
ttcttggtct cagcaggagt catgtctcca cgggctccac tactagcagc atctatcata 180  
ctctctctcca tattactgag tcttccataa aaatattgga gaagaagctg ctccgaaatc 240  
tjatgggtgag gccaattggc acatagcttt ttaaattctt cccagtattc atataggctt 300  
tctccactga gttgactaat acctgagata tcttctctga tggtcgtaga cctagaagca 360  
cggaaatatt tctctaagaa tactctctta aggtcctcc 399

<210> 18358  
<211> 438  
<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 18358

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cctcagccaa cttgcttccct cactagcagt tgcctagtgct atcctctcat attccatagt  
cctcagccaa cttgcttccct cactagcagt tgcctagtgct atcctctcat attccatagt  
aaggtracctc attacccttt caatagcgtg ccagtgctcc ataactangtc tactggtaaa 300  
cctgcataat aatccacaaa cataggctat gtcgggtcta gtacaatcag tggcatacct 360  
aaggctgcca atgatacttg catactcagt ttgtcgtata cattcaacag tgttcttaaa 420  
ccaatttaca cttggatc 438

<210> 18359

<211> 437

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 18359

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atgataaaga tgaagaagaa gcggaaggt tattattaat gtacgttccg gtgagggaaa 120  
tcaaagtaaa ggggtccaaa acaacgaaag tagaagtgtc aggaagagtt tggcagagag 180  
tggtctccaa gatagacca gatgcacatt gcactgtgat gctaacttga caatggcgcg 240  
caaattggac cagggcctca ataacatcag aatttttcgg gacttgaatg aagatgggtt 300  
tcaaggcaag atcgtatctt tggttaataa cgaggggtat ttttggcttg ttcttggatc 360  
caaggggctt accacaacct ttgtttgagg atggtggcat ttggtgagag gaagatccaa 420  
tataattatg aacagtg 437

<210> 18360

<211> 339

<212> DNA

<213> Glycine max

<400> 18360

agtttgaatc ggacctcagt gtgaaaagtt atgaccattt gaattttctcg agagcttccg 60  
 tggttcaatt cegagcatct cgacatatta tgtgcccga tctgaccttc gtgtgaaaag 120  
 ttatgacctt ttgaatttct cgagagcttc cgatgtgtaa tttcgagcga ctcaatatat 180  
 ttttgccttc aatcctcagt cactttcaga atttatgacc atctctattt ctcaatatct 240

<210> 18361  
 <211> 354  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 18361

agctnattga tttaaataaa gcttagaaaa ataggaataa ttaaggaaat caaatgchaat 60  
 taatgaaagc taattgagga aagaatgact aattgaggaa attagagcta attaaggaaa 120  
 acaaattaat tgaggaaaga atggttattt gatgaaaata tggctaatta aggaaaaaag 180  
 attaattaac gaaaacaagt taattaagga aagaagaata attgagaaaa aacatgatta 240  
 attaaggaac taaagacaga cttagtgcga gaagcccact aatctgcacc tataaaagaa 300  
 gaagagataa gaacgaaaag accaaaaatt tctaccgaat acaattctta tata 354

<210> 18362  
 <211> 401  
 <212> DNA  
 <213> Glycine max  
 <400> 18362

agtcttttgc tagaaaaatg cagaaaccaa aaaatcccc tggttttcat acagccgttg 60  
 tccatcgagg tactgaacaa aaccatcaat gagatatgga ccaacataag aagccaaagt 120  
 gtttaacaat acaagaaaag ctgtgataag aatctccttc catgctgaaa ttattaacga 180  
 ttccaccaac ttcaatgttg tgacactatt aattccacca caatcagcct caactttctc 240  
 ttgtgaaagt gaaaaagcag caattacact atctctgctc tctagttgag gaacatcctc 300  
 aadttcagg gtctttctat taccacagcg tataagagga cccacccaag agaagutaag 360  
 aatgtcctaa attccagcat atgagaaaag cytaactgag t 401





tgcattacac acatactgta atcgattacc agaggagaat ttcataanaat attctcaaca 60  
 gtcacatcgt ttcgtttggg ttcttgattg accatcaaag gcttatatat atgtgacttg 120  
 agacacaatt ttttaaagag ttttcaaaac aacaagtgtt aatctctcaa aaagcaaaat 180  
 ttttctctct ttttctctct ttttctctct ttttctctct ttttctctct ttttctctct  
 ttttctctct ttttctctct ttttctctct ttttctctct ttttctctct ttttctctct  
 ttttctctct ttttctctct ttttctctct ttttctctct ttttctctct ttttctctct  
 gtaagaatt acaagatagt gaact 385

<210> 18366  
 <211> 403  
 <212> DNA  
 <213> Glycine max

<400> 18366  
 agctttatct ccaaaatcac atctacagga ccaaggtcct tcatatcaaa attattagac 60  
 tagaaaaact tcacatcatt tatggaatgt atattactac caaatatcaa tatgttatcc 120  
 acatacaaac ataaaatggc acatccatta tcatcaaatt gtttcactac acacatttat 180  
 cactattatt aatttgaaaa taatacgaaa gaataacttg atcaaacttt tcatgtcatt 240  
 gctttggagc ttgttttaag tcatataaag atttaacaac caagaatcta taagtagtac 300  
 taagcaaaga atatccaaca aaaacataat taacagttta tggccaatt tttgcttttc 360  
 ttattaatag ggaatgttaa ccttgctaga cccccccaca ctt 403

<210> 18367  
 <211> 454  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18367

gcttaaatct agttttaatt ataaattact acaagaaaat tatgttatat attattttac 60  
 tgcaaaactaa gaaataaaaa aattacttta aagtaaaaat ctacttctaa ttaaagatta 120  
 ttttaaaaaaa attatcatat aaattatttt actggaaaact acaaaaataaa ctataaatct 180  
 aatttaatta taaaattaat aaaaactata cattcaaaact gctataaata attacttaca 240

taaaattata acaaaaatgt attatcaatt acaattatgt tgattgttat ataatttttt 300  
 tcatatttac caactttttt caggactcaa ttttttttta tttaaataaa tatcatgaca 360  
 tattccctttt ctttrataca cacaaacaag ggaataaaaa tataaaatgc atttaattaa 420  
 aaaaattata acaactataa attcaaaatg gtc 480

<212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18368

gtcttatgaa ttctttcaaa ttaataagag aattgtatgt tatcacatct ggttcacatc 60  
 ctgcattctt catttctcca aacacagtga ctgctccagt taacatccct acctttccat 120  
 accatbaaat gagaggatta taggtgacaa tgtctggcct aagaccaga gctttcattt 180  
 ctccaaataa actcctggca gttcttatgc cccctctctt ggccagacag cctatcacta 240  
 tattatagct aaaaactgag ggcgaaaggc cagccacaac catgtccttg aaaaggctta 300  
 atgccaattc ccccttgctt gattttgaaa gctgtgaag aagatcatta caagacctca 360  
 cttttggcag aacctgaac tngttcttct tccaaaa 397

<210> 18369  
 <211> 120  
 <212> DNA  
 <213> Glycine max

<400> 18369

ctagttcact acttctagta gttcaagata tgcttctaga ggatttctgt tgccaaaaag 60  
 ttactctcag gccaaagaaga tactatgtcc gatgggtatg gattattata agattcatgc 120

<210> 18370  
 <211> 394  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18370

adcttgtagt tatatagaga tgaatgaagg gagagagaga gaagagcatg aaattttgtg 60

ctctaaaaga gctctgaaat ctgaagttaa tattcaaattg atcaaagttg aaaaaaaatg 120  
 cacacacatg acctctatctt atagcctaag tgtcacacaa aattggaggg aaatttgaat 180  
 ttcaattcaa atttcacttt aatttgaaat tgaatttgtg gagccaaact ttggagccaa 240  
 aatttcacta attatgatta gtaaatctta gttatgcttc accttactaa tcaaatatca 300

<210> 18371  
 <211> 451  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 18371

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 ccttatgtgc caaatgttgg aatccaagcc accattgtc ctccagctcc ttctcaagcc 120  
 aacatagcta ctgctagttc agcaccttca aacagatgga atccggattc tagtgcctcc 180  
 caccatgtca ccaatgtttc tcaaaatata cagcaattaa caccttttga agggtcagac 240  
 cagataaacac ttggtaatgg acagctcctt gacattaact ccacaggtct aacttcattt 300  
 caatctcctt taaaccttac gtttctctta attcttagca atttgctata tgttccttca 360  
 attactaaaa ttcttattag tgtgagttag ttttgtaagg ataatctagt taattntgaa 420  
 tttcctccta ccttctgtta ggtgaaatca t 451

<210> 18372  
 <211> 393  
 <212> DNA  
 <213> Glycine max  
 <400> 18372

agctttgtat attgggtgaa gcacgctaag atgtcggtyt gttgctatga cgaatggctc 60  
 catgcgcgca tgagtattta acctatgaag aaatcaaaag taattaatat acatttgaga 120  
 gagagggatt agagattgaa ttatctata tatgttgata tatagcaatg aaatgaaaa 180  
 tgaaaattta tacaatccc tcatgagttg atggtagcaa gattcaatta cgaatgacata 240  
 agctttggct agtagccaaa ttgtgccttc aacaccttcc ttagcaggtta agacgacttg 300

actgacggca gctgacagat ccccagcaga atgtggcaaa cttaattcga tggccactgg 360  
ctttaaagtt ccattctctc tcaataaaag gat 393

<210> 18373  
<211> 443

<210> 18374

agttttctaa tggtaggctt acccttctac ctataaatat ttgcaaaactg aaagctcttt 60  
tatatggatt aaaacagga ccaagagtat gggttgaaaa gtttcgctcg acaactacttg 120  
tttttgaatt cactcaaaagt caggatgata cctctctttt cctacacagg actcctaaag 180  
gcatcatgga gcttcttgggt tatgtggatg acattgtggg cactggctca gatcaagatg 240  
ctgtttctag aacaaaaaat cacctgcatt caacctttca gatgaaagac ttagggcctc 300  
tcacttattt cttgggttta gaggcgcatt ataataacca aggcatttct ctatgtcaac 360  
acaagcatat tcaaaaactgg gtccactagc tggactccc 399

<210> 18374  
<211> 443  
<212> DNA  
<213> Glycine max

<400> 18374

tatgggtgtcg ctcatgttct tggtttccct cacctacatg tgtttaract ctaaagctgg 60  
tttccacgtc cacatcatca agcacgtgca gccacgtccc tttcatcctc aaccacctct 120  
tcccttctct aaacgtaacg gagtggccgt ctccatccca aacttccgcg accggaaagg 180  
ggaaacggcc ggtgcgcacg aaaacggagc tccgccacct ggtgttcgga atcgccggct 240  
catcgaagct atgggagcac agaaagaact acataaagac ttggtacaag aaggacaaga 300  
tgaaggaggt ggtgtggctg gacgatcgcg tgaagacgaa cccaaaggaa ggyttgccac 360  
caacgaaggt gtccacgcac acctcgaatt tegtatacac caacaagctg gggcaccgct 420  
ccggatttcg aattctccgc atc 443

<210> 18375  
<211> 405

<212> DNA  
<213> Glycine max

<400> 18375

agcctgagaa actcaattag cataaataga taatataaga gaatataatc acaattatca 60  
tctttttaa atctatctta ccttgaatc ccttgaatct atcttctt gttggtttaa  
tcttcttctt ccttgaatc ccttgaatc ccttgaatc ccttgaatc ccttgaatc  
tcttgaatc ccttgaatc ccttgaatc ccttgaatc ccttgaatc ccttgaatc 120  
tattgatat tcttttaggt ttgggtggat aagaacatg aggaaggaa gaaagcatta 300  
tggaggtggc caatgggttg ttaaactagt tagggtaaat agtcactttt atctttaaat 360  
gaatataaaa tttagttttt gatagtgtaa aaagtgcgat aaata 405

<210> 18376  
<211> 435  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18376

tatccagaag aacttctagg agaagaaaaa aatgaaatga tcttttctat aagtgaat 60  
tatcttatgt acaagaataa ttgtagaaat tctctcatct ttagagaaac tagatgacaa 120  
gtttctacca acttaggggg agccctagca gatataaaaa aaagttggaa agttaaat 180  
tctcacaatg ataataacat acatttctct tcatgttaat gctgtcagtc aatttctcaa 240  
tgcaccatgt gatagtcatt ggtatgtagt tgttcagatc ctgagatgca tcaaaggatt 300  
aactggcaaa gggcttattg atatgaacaa ggctaacatc attgtacata caaatgcaaa 360  
ttgggaaaga gatgctagtg atagaatata cagcataggc tattgtgttc ttattgggtg 420  
ngacttgata ttgag 435

<210> 18377  
<211> 404  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18377

agcttatcta tcaactttga catgcaacct atcaaggata ttggctata atcatttagg 60

gactgaggat gggttaacttt ggggataaga gccaaagaaag aggcattgct gcctctaggg 120  
aaacaaccgt tgacatggaa ctcacccaca aatcttctga actctgggtt tagcacactc 180  
cagaattcct taataaaatt gaaattaaaa ccgtccggcc cagggcactt atctccacca 240  
caactcaga cgttctctt aagctcttg tctgctcctt cctctctt cctctctt  
cctctctt cctctctt cctctctt cctctctt cctctctt cctctctt  
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<210> 18378  
<211> 399  
<212> DNA  
<213> Glycine max

<400> 18378  
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atgcaagagt aaggtatttg ttaagcaaac tgaactaatg gcaatgatag gtataacatc 180  
attgttaggc agagtgcacg ttttatcaga aacaagttgg taagaccgaa aatgatgaag 240  
ggaacaagaa atatgaatgc tggcaccaga atctaaaagc caacaatcat gaagaaaatt 300  
agaagtggat gtagaaagga tcataccact ggcagaagaa caccttgagg gatgaaacat 360  
tggagcatga cttctaaaag attatcaatt ggtatattg 399

<210> 18379  
<211> 391  
<212> DNA  
<213> Glycine max

<400> 18379  
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tgttgaaggg ttggcacaga gcatagtaag aggggatgtt ccaagcaacc ttgctgatgt 180  
gaggcttatt ggttggata tggggcggtt ggtcgcggtt gccaaagtata gaggcgagtt 240  
tgaggagcgg ttaaagctct ttttaaaaga agtggaggag gctgagggga agtgatattc 300  
cttcattgat gagattcatt tggctcttgg tcttggtaga actgaaggct ccatggatgc 360

tgctaattcta ttcaaaccta tgettgtctg c

391

<210> 18380  
<211> 406  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations

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cctttcaaat aaacctcaga accttcctct cttccctttc atctcagcc accggggaca 180  
gccatttcta caacacaaca ttccacggaa ccaacccctc cgaacacatc taaggcatgt 240  
tcattgttag gggcgacgtc cctttctcagc ttgttcaagc atgggtcata aacggcactc 300  
aaagaactct ctcagaatgc tccttgtcca aagaatcggg gtttttggtac taagagtgca 360  
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<211> 442  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18381

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atcaatatgc ttgcttcttc catgtagaat tggatttctt gacaatttaa tggttgaact 180  
atagtcatag aaaattgtag tagctttaat ttgcttgaac tacaactcct caagaatttt 240  
tctcaacctt atttggcttg gcaaggtgac aattgggttg ttttttagatg accacaaaac 300  
gacactgtt ccaagcataa agacagaacc aaaagtgtc tttctatcat ctagatcacc 360  
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ttggcagcca acaaatgcaa ct 442

<210> 18382  
<211> 287  
<212> DNA

<213> Glycine max

<400> 18382

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agaaccaata ctctctcttc tctctctcag aacacatcaa taatctg 240

<210> 18383

<211> 397

<212> DNA

<213> Glycine max

<400> 18383

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cagaagtgat ccagatgcct acctggactg ggaaattaat attgagcacg tatttgcttg 180  
caatgactac actgatgtgc ataaagtcaa gctaacagca gctgaattct ccgactatgc 240  
ccttgtttgg tggcataaat accatagaga aatgttgaga gaggaacgac cagaggtaga 300  
tacatggact gagatgacaa gggatgatgag aaaaaggtat gtgcccacta gctataacaa 360  
aaccatgcga cagaaac 377

<210> 18384

<211> 397

<212> DNA

<213> Glycine max

<400> 18384

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gcttaaatat ccttacaatg atgtttttcc atccttatcc aactctgtca ctccatctaa 180  
gagtaacttc ctaccaactg ctcatattcc cactgtttca ccttctctca atgaaccag 240  
tcttccctct caaactgctg aaactaatcc tcttctata aatgtctacc ctctatctgc 300



cctaaatgct gaatgcacca attcccaaaa tgtcacacta tcttcttctt ctttgactgc 360  
tgaaccaact tctgtaaatg atgaacactc taacact 397

<210> 18385  
<211> 377  
<212> DNA  
<213> Glycine max

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cttcacatgcc atatgttagca aagtcattga tctgttcaag tctgatgagc tggaaaatga 180  
ggctgcaatt atactgtgcc aatcgaagat gtattttccc cctgcttctt ttgacatcat 240  
gattcacttg attgtgcac tgtcagagaa attaaatgtc gtggctcttg ttatttgcac 300  
tggatgtacc cgtttgagcg atacatgaag atcttaaaa ggtatataaaa tgaatttata 360  
tcattccataa gcattta 377

<210> 18386  
<211> 394  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 13386

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ttgaactaac atccatatag gacacaaaact gctccctcca agcacacatg aacttaaccc 180  
caacaatcaa cattgagcaa gcttaagcgg tgatcaaact tctcttttgg aacaagcttt 240  
atgaacatat cagcaggatt gtgtagagtg ctaatcttat gaactttgat tcttcttctt 300  
aacccaatga agtgatatct aacatctata tgccttggttc tatcatgatg aacttgatcc 360  
ttggccaagg atatagcact aagcctgtca cagt 394

<210> 18387  
<211> 405  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
 <400> 18387

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 tttttcttaa taaatttggg ttgaatttga atatttctaa ctatttctcc taaatttggg 180  
 tttttcttaa taaatttggg ttgaatttga atatttctaa ctatttctcc taaatttggg 240  
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 ctttctacaa gaatgaagct ctgataccac ttgttagaca agtggcctca 405

<210> 18388  
 <211> 394  
 <212> DNA  
 <213> Glycine max

<400> 18388  
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 ttcattcgat atgtaccata gtctgggac ctgtcaagct cgatgagcta taaaatgagg 180  
 cggcaataat acagtgttag taggagacgt attgtcccc tgctttcttt gacatcatga 240  
 ttcacttgat tgtgcatcta gtcagagaaa tcaaatgatg tggacctgta catctgctgc 300  
 ggatgtaccc gtgagaacga tacatgaaga tcttagaagg atatacacag aatctatctc 360  
 gttcagaagg cattaatgat gagaggtaca ttgc 394

<210> 18389  
 <211> 395  
 <212> DNA  
 <213> Glycine max

<400> 18389  
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 ctggagttgc tttacatgat gtccaacggt atgtcaagga ataagatcgg detgcacaat 120  
 gcacaaggca aatataaaatg tcaaatgaag aattgaagt gcaggatcca cgatgtccga 180

tacaatgtcc tgacatcctg cccgaaaata ctggagttgc tgtacaatgc aagataaaaag 240  
 acaagtgcag aagtgaagct gcaggatcca cgaatgtcgga tacaatgtcc tgacatcctg 300  
 cccgagaata ctggaattgc tgtacaatgc aagataaaaag tcaagtgcag aagtgaagct 360  
 aaatgaccca aatgtctcga aatgtctcga tcaaga 390

<210> 18390  
 <211> DNA  
 <212> Glycine max

<400> 18390  
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 gaactgcatg agcaaaccac aaaaaattgt ttatataact ataaaaatta gttgtatgta 180  
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 tetgaatatt acgaaagaga tgttcttctt cagattttag tetgaagaga aggtcaaaat 300  
 aatgcatatt ggaaccacca ccagcatgcc actcaaatc cacatagtea atctgataag 360  
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<210> 18391  
 <211> 449  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
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 ctatccggaa ctatatcaaa atggtaactga tactgcctaa tgaaggcaac ctttatgtcc 240  
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 agattttctt ggaaggaatg tctcagcagt tcttcattct ttgcgcacgc cctcatcttc 360  
 caataatata tctttagatg gtctctccc aaatagctcc ctgtaacttg tcaaaagcca 420  
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<210> 18392  
 <211> 404  
 <212> DNA  
 <213> Glycine max

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 cagggttctt agtaaggcag ttccaaagac atcttttgaa ctgtggacaa ataggacacc 240  
 tagtataagg cacctgcatt tttgggggtg tcaggcagaa ataagaattt acaatccgca 300  
 agataaataa ttggatgcaa gaacaatcaa tgaatatttc attggttatc cagaatagtc 360  
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<210> 18393  
 <211> 386  
 <212> DNA  
 <213> Glycine max

<400> 18393  
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 gaccttcaat attttgatac ttaaaagata atagattcga gtataatttt atcttatatg 300  
 actaataatt tttaatcaag agtcactctt tttgtgactt aaaataaata taacaataag 360  
 agagatgact ctacgaaata tgaata 386

<210> 18394  
 <211> 390  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18394



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 cgatctatta cgggactcaa tcagacattc gagtaaaaag ttattgtcgt ttgaattcgc 360  
 tgaadcttc aacattcaat tgaadctgc tgaatatt a 420

<212> DNA  
 <213> Glycine max

<400> 18397

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 gggtaggacc acttaacttt tcaactaaaat aagcaattgg atggccttct tgcattcaaca 180  
 cagccccaat cccaacattg gaagcatcac actcaatttc aaaagatttt tgaaagtgtg 240  
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<210> 18398  
 <211> 393  
 <212> DNA  
 <213> Glycine max

<400> 18398

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 gagaaattca aatggtcaga acttgtcaca cggatgtccg attaaggcgc ataatatatc 180  
 aagatgctcg aaactgaaca acgaatgctc ttgagaaatt caaatgggtc taactgttca 240  
 cacggatgac tgattcaggg gcattatata tggagacgct tgaaattgaa caacgaatgc 300  
 tctcgagaaa ttcataaggt cataacttgt cacacggagg ttcgattcaa gtgcataata 360  
 tctcgagacg ctcgaaattg aacaacgaat gct 393

<210> 18399  
 <211> 316  
 <212> DNA  
 <213> Glycine max

[illegible]

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cgggcattcg agtgaaaagt tatgaccatt tgaatttctc gagagcttcc gctgatccat	180	
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13400>      13401
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catcaacgat ttttccatgc atgctatcca cgaatatgat gcttgytcca ttggaactct      180
caacatatat tttacattac aatcgatgga atttaattca gctaattgaa ccacgacata      240
taacatatta ctaacttcta atatctgatt ttattcttcc atgtaaaaaa catatttcat      300
atgatattac attgattcaa atg                                     323

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18402

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> 210>      18403
> 211>      349
> 212>      DNA
> 213>      Glycine max

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cttatgtttt	taatttcaag	catctcgata	tattacggga	ctcagtcgga	catccaagta	180
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attttacggg	actcaatcag	acatccgagt	aacaaattat	tgccgtttga	atttactggg	300
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>223>      unsure at all n locations
>400>      13404

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<210> Glycine max

<223> unsure at all n locations  
 <400> 18405

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 aatctatcaa caataaccca tataaaatct aaacctctca gggttctagg tagtcttacc 240  
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<210> 18406  
 <211> 186  
 <212> DNA  
 <213> Glycine max

<400> 18406

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 cagcgc 186

<210> 18407  
 <211> 436  
 <212> DNA  
 <213> Glycine max

<400> 18407

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<212> DNA  
<213> Glycine max

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<210> 18409  
<211> 320  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18409

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<210> 18410  
<211> 433  
<212> DNA

<213> Glycine max

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<210> 18411  
<211> 433  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
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<210> 18412



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<210> 18415  
 <211> 405  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
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 aaaatactct gaagcttttg cattgtgtcc tatgagatca aggaaggaga gagttgttct 300  
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 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 18416

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 atgtaagtta ttgtgataa tctgcattag caaacaacag cctaaacatt ggaatgatca 180  
 gaagatacta ttacactttt gctagggggc ctttctttgt ccttctatca ctgtggaact 240  
 catcatcact cttcactttg taccatgata ccccaacact gttgcattta ttgagtctt 300

caaactcatg tctgtgcaat atgcaatcat tatagtattc atgtatnttt tataactccat 360  
 acccattaga cacaatatct tcttcgcctg ataataactt 400

<210> 18417  
 <211> 332  
 <212> DNA  
 <213> Glycine max  
 <400> 18417

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 ggcagtggagg gcttcccttag ctctcttggt aaacataaga acattacgaa tatgaatgac 180  
 aacctcaaag gagttgtggg gaaggcaaaa gagattctag aagtaggatt aagcctctgc 240  
 ctccaagatg tttgcctcgc agcaccaggt gccatcctcg agctttagat tgtgaataat 300  
 gttacgatgc ctacgcacaa tagtttgagt gtgaaaaaac ttagtggttc ggtagcccca 360  
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<210> 18418  
 <211> 332  
 <212> DNA  
 <213> Glycine max  
 <400> 18418

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 ttcagcagga gtcctgtctc caagggctcc accactagca gcctctatca tactcctctc 180  
 catattactg agtccctcat aaaaatattg gagaagaagt tgctccgaaa tcggatgggt 240  
 agggcaactg gcacatagtt ttttaaactc ctcccagtat tcatataggc tccctccact 300  
 gagttgtata atactgaga tctccttctt ga 332

<210> 18419  
 <211> 399  
 <212> DNA  
 <213> Glycine max  
 <400> 18419

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 tcaacacctg gaagcgaccg ttcttataga gagaggcgct tccacatctt cttagggtgg 180  
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 attggaatct cttgggctt tctgggctt tctgggctt tctgggctt tctgggctt 360  
 taggacaatc atgatcgggc tagcggacc aaagetatg 399

<210> 18420  
 <211> 407  
 <212> DNA  
 <213> Glycine max  
 .  
 <223> unsure at all n locations  
 <400> 18420

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 ggcatcacia ggagagttag agtagctaga tgaggccatg atctttactg caattatacc 180  
 aactatgaat caagcacgta caataaaaca atttactctc aaatgttgga ataagtgcct 240  
 acgatagatt ataggaacaa ttgactaatg ctcacagaaa catattgatc ttctttaata 300  
 tttatataag caataaggaa ataattcatt atagagagta caaattgaat ggtactctaa 360  
 ttcatgagta caacgtttta gataacatta aaatcaaaat acattac 407

<210> 18421  
 <211> 416  
 <212> DNA  
 <213> Glycine max  
 <400> 18421

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 aagaacccctc gtagggcaca ggtattccga ggagtaggac atgtttgcac cgtgggtacc 180  
 tctggcctaa ctgttccac cctttcttcc gataccaagt gggccagata tctcacttgc 240

tgagttgcga aagagcadat tgataacttc atgacaaaagc tatgggtcagc taagaacttgc 300  
aatatctttc gcaggtgctc aaggtggctc gagaaggtct gactataaat caaaatatcg 360  
tcgaagaaga cgattacgaa tctatgcata taagggtcga aggtctgatt catagt 416

18423  
405  
DNA  
Glycine max

atttcgtttt aa gggctc tggc tgggtatctg 60  
aacttcttct attttctttt aaaaactttct aaatatagca gaagattatt tttcacggaa 120  
gggttttc aaagaagtc aaacaagggc 180  
tcgatgagcc aaaaaagag ggggcactga tgcgaact tcagcacctt aattcttgtaa 240  
aacttcttgg ctctctcatt gaacgagaag a ttt aatttatgaa tacatgcaca 300  
ggacccctta cgattttatt ctaaacatct 360  
tgc ttatacactt acagcg 406

<210> 18423  
<211> 405  
<212> DNA  
<213> Glycine max

<400> 18423  
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ctactcgggt gcagaacatt tagagagtct gaattgacta taggaggctg aaccaggtta 180  
ccaaaaagga ccattttcca ctgccattca ttgacgggat gcttgaatgc ttggcaggat 240  
tatataggcg ctttataaga gatttttagca gactagccct tccactatct aacttgttgc 300  
aaaaggagat ggagtttgac tttaatgata aatgcaaga ggaactgact accaccctta 360  
tcattcagga aactgattgg acagcccat ttgagetaat gtgag 406

<210> 18424  
<211> 392  
<212> DNA



<213> Glycine max

<400> 18424

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tattctttt accccaaga aacacaccca ccaggtatgc aaatatata gttcttttt 120  
ggtttttt tttttttt tttttttt tttttttt tttttttt tttttttt  
ggtttttt tttttttt tttttttt tttttttt tttttttt tttttttt  
ttaaagcgtt gtcagtgttc catagaggc ctatgggtta accgcataa taatccata 180  
acataagcta tctcgggttc agtacaatca ggggcatacc taaggttgcc aatgataact 360  
gattactcag ttggccgtat accttcacca gt 392

<210> 18425

<211> 391

<212> DNA

<213> Glycine max

<400> 18425

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cctaaaatca aatctcactt tggattatta ttatggaaat gtagttctaa aatctactac 180  
tataacagag gtggtgatgc ttacagttga gagtcctata ccttggtggt cttgtcgaaa 240  
aagttcatag gcataggcct gttaaataga ggagttaggc acacagaagc ttaaattgaa 300  
gggtgaaagc gatcgaaacag ttatatattc aattgtgcac acacattcaa gacttgtatt 360  
ctgaaacatg agagtgtcaa ctttgatacc t 391

<210> 18426

<211> 398

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 18426

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atatattata ggggtcaatc ggacatccga gttaaaaaat attgacgctt gactattctt 180



ttgggttgatg ccttaa

435

<210> 18429  
<211> 421  
<212> DNA  
<213> Glycine max

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ctcaataaac gctaacatt ggcattgatt tcccttggat tataattggg aatgtaagaa 180  
ctgcagtcta tccaattcg ttgactacca ttgacaagaa ccaatgggtat tactgggtatg 240  
tacctgtaag ggcagacaac aaaaattatg ttttaagggac acatgcaaat gcagtagaaa 300  
agacaaaacag attctatcaa ctgaaaaact gtgtntgaat accatacaca aacaagggct 360  
aaattgtaga tgtttcactc tcaaccgcac catcaaagat actgacaaaa acatgttgat 420  
g 421

<210> 18430  
<211> 396  
<212> DNA  
<213> Glycine max

<400> 18430  
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tttgccttc tgtgcaacaa tctgaagcaa ttgaacagcc tgaagcttat gctgcaaaca 180  
tctacaacaa acatcctcaa cctcaacagc aaaatccgcc acaacaaaat agttatgacc 240  
tcttcagcaa caggtacaat cccggatgga ggaatcatcc caactttaga tggtaaatc 300  
cttcacaaca gtagcagcaa caacaacaac ctatattttaa aatgttggctg gcccaagcag 360  
accatacatt ccaccacca tccagcaaca acaaca 396

<210> 18431  
<211> 416  
<212> DNA

<213> Glycine max

<400> 18431

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tctgtgtgtg tctgtgtgtg tctgtgtgtg tctgtgtgtg tctgtgtgtg tctgtgtgtg  
tctgtgtgtg tctgtgtgtg tctgtgtgtg tctgtgtgtg tctgtgtgtg tctgtgtgtg  
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ccactgatgt gactaatacc tgagatatcc tttctgatgg ctgcgcgcct agaagcaggg 360  
acatcttttt ctaagaatac tctcttaagg tcatcccagc tctgtgatgga ccattgg 416

<210> 18432

<211> 398

<212> DNA

<213> Glycine max

<400> 18432

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ccaccttttg gcgtattctt ttgaaagatt cgtgccacct tttgcacat gttctgtagt 180  
tgcacccat ccgaagacat tatactgaca ctgcctaacg aaggcaatca ctaggctcct 240  
ccaagaattg actcgggaag gttccaagtt agtgtgccaa gtaacagcta cccagtaag 300  
actttcttgg aaggaatgta tcagcaattc ctcatctttt gcgtatgcct ccattctccg 360  
ataatacatc tttagatggt tcttggggga agtagtcc 398

<210> 18433

<211> 404

<212> DNA

<213> Glycine max

<400> 18433

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ctttgtgtct ctatttgggt ctttaacctc tcatgcatt tctttacaaa tcttgacct 180

gattccccctt ctttatgtat aaaagaagtg tccagtggga ggggaatgag gtctaacggt 240  
 gttaggggat taaaccata gacaacctca aaaggggaact gcttggtggt tctatgaacc 300  
 ccactgttgt aggcacattc tacatgagga agatactcat cccaagactt atggctgect 360  
 ttcaaaagat ccttataag cctgataaa gacatattca ctac 404

<210> DNA  
 <213> Glycine max

<400> 18434

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 gggttagggg tcaaagattt gattaaattc aatgaggctt tgcctgctaa atgggggtgg 180  
 gagtggaaa ataatcagaa tcagttgttg gccagaattc tattgtctag atatgggtgt 240  
 tggagggatt tgattttctga tatgaactgc agtttagact ctcttgggtg gaaagacctc 300  
 aaggatatct tcaagcagca gcatagcaac acaatttgca atcacctgaa gtggaagctg 360  
 ggatcggga 369

<210> 18435  
 <211> 403  
 <212> DNA  
 <213> Glycine max

<400> 18435

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 tgtttagtga tcataatagc cttagtactt gtttggctag aaagagttga acatgcatca 120  
 aaggagatgg tttagatttc ttgaggatta tgattttgag ctaagctacc atcccaacaa 180  
 agccaatgta gttgctaacc ccttaagtag gaaatcccta catatatatg ctttgatggt 240  
 tagagaattg gatctcttaa aacaatttac agactttatc cttgtgtgtg aggttacctc 300  
 taacaatgcy agactaggag ctttgaggat tactagttag ttgttaggag agatcagata 360  
 tggcctaaaag gctgactctt ttctgaagac taagatagaa gct 403

<210> 18436

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<123>      unsure at all n locations
<400>      16436
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[illegible]

<210>	18437
<211>	423
<212>	DNA
<213>	Glycine max

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<223>      unsure at all n locations
<400>      18437
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gtttatgagc aactcaggat tcaaaagatg tgacatggac cattgctgct atgttaaaaa	120
atataactaat agttatgtta tccttggtgt gtatgttgat gacatgttga ttgcaggatc	180
tagtatggca gaaattaaca gggtgaagca gcagttggca gaaaactttg aaatgaagga	240
tccttggctca gctaaacaaa tccttgggtat gagaattctc agaaacatat cagaaggaat	300
tttgaagctg tctcaggaga aatatataca caagttgctt gacagggttt accttggaga	360
ttctaagacc aggaataccc ctttggggtc tcatttgaag ttntcaaaga agcaatcttt	420
cca	423

-(210)-	18438
-(211)-	394
-(212)-	DNA
-(213)-	Glycine max

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1213> measure at all n locations
1400> 19436

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tgtcttaaga aaaccattc cccaacctca aaatgcctgt cagccctctt tctgtcagct 60  
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 tctctgtctt gtaattccct cctaaccgct tccacgtgaa cctccctggg taaaaacct 180  
 tgggtcttca tectattctg cgtcctcgc aactgatact tcaactgtga aattgcttca 240  
 tctctgtctt gtaattccct cctaaccgct tccacgtgaa cctccctggg taaaaacct 300  
 tgggtcttca tectattctg cgtcctcgc aactgatact tcaactgtga aattgcttca 360  
 tctctgtctt gtaattccct cctaaccgct tccacgtgaa cctccctggg taaaaacct 394

<210> 18439  
 <211> 395  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 18439

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 gaagaagaag acaaaaacaa tatttatact ggttcggcca caaaccgtgc ctacatctag 120  
 tcccaagca acttgcgggtt cttgagattt ctttcaacct tgtaaaatcc ttacaagcc 180  
 aaagatccac aagggatgta ctctcccttg ttctctttga ataaccaagt ggatgtaccc 240  
 tccacttgaa ctgatccaca agagatgtac cctctcttgt tctcagtata acaatcccca 300  
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 aattctcagg cggttagtcc tttgaatctt tgtaa 395

<210> 18440  
 <211> 402  
 <212> DNA  
 <213> Glycine max  
 <400> 18440

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 gggaatggat attcattcct cccagcttct tacaaggagg ctgaaagggt gctgggtgta 180  
 aagcttgggt gaatatctcc ccaacttcca tcaaatatga aacggaagg agctttacga 240

gaccgcgaat gaactttgtgg cggataatat ggcaatcgat ctcgatatgc ttagtgcggt 300  
catggaaaac gggattttgtt gctatctgaa ttgcagattg gttgtcacia tataagggtgg 360  
ctggctgaat aaatgctaca ccaatgtctt ggagaatata cg 412

<210> 18441

<211> 412

<212> DNA

<400> 18441

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ttgaccatgc aatagaaaact agagtcttga tttctatcta gtatctagag cagtatcatg 180  
ttctgtggct tgcaattttt taaaaattga tgttcttatt tgacaatcct ttattttgatg 240  
cagaaaatcc attatttgat aatgatcttt cctcattttt tttctcattt ctactactat 300  
tttttatatc cataataatc aggtgctttt tcatcaggtt tattaataac ttgaaccctt 360  
tccttctttg ttttcattta taatgcatct aatcta 396

<210> 18442

<211> 412

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 18442

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cacatacctc tctaattggct aagctcacct ccttgagatg agaagctaga gcttagctac 180  
acacccctta taatagctaa gctcaccctc atgacaaaat acatgaaaat acaaaaacaaa 240  
atccttactg cacagactac tcaaaatgct tcaaaatata aggctaaaac cctatactac 300  
tagaatggct aaaaatacaag gcccacacga aggagaaaac tattctaata ttacaaaaga 360  
taagcggttt catacttagc ccatgggctc anaatctacc ctaaggctca tg 412

<210> 18443

<211> 338



<L12>	DNA
<L13>	Glycine max

8.210>	18444
8.211>	406
8.212>	DNA
8.213>	Glycine max

agcttgtatg gtagcntaag gctatatcca gaaggaaaaa gtagactata atgaaatatt	60
cttttttagta gtttgacaca cctccacacg tgtttggcta gccctagtgg caactcttga	120
catguagtta aagcaattca gtgccaaaac tgtctttctc catggaagac aagaggaata	180
catttatgatg ttatgatttg aaggttttga ggtggaagca aaggaaaatt ttgtcttttag	240
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caaggtggag gatggttccc acatatatct attactctct atggat	406

<210>	18445
<211>	423
<212>	DNA
<213>	Glycine max

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agatgttcca gctctcagca acaaacaccg cctgtctctt ccttcacaaa tctgtctggc	180

ccaagcagac catacattcc tccaccaatc caacaacagc aacaacccca gaaacagcca 240  
 acagttgagg cccctccaca accctccctc gaagaacttg tgaggcaaat gactatgcag 300  
 aacatgcagt ttcagcaaga gaccagagcc tccattcaga gcttaaccaa tcagatggga 360  
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<111> 1-111  
 <111> 399  
 <112> DNA  
 <113> Glycine max

<123> unsure at all n locations  
 <400> 18446

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 tttgttagtc tggaaattga tgataggagc tattcaagtt gtcttattaa tgaagaatgg 180  
 gagagaggac aaaatatgtg tgattttttg cgtccctttt tttaaatcac agagttgata 240  
 tctggttccct cttatccaac gtctaatttg taattcatgc aagtgtggaa aattgaatgt 300  
 ntatlgcttc aaaatttgag taataaggat gagttgatta gaacaatgga aattgatatg 360  
 aaaacaaagt ttgataaata ttggagtgat tatagcaat 399

<210> 18447  
 <211> 408  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18447

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 ttctcccgaa ctgttccatg tttcatcttc ttctcaatca cttgcaatgg aatcactctc 120  
 tgggtcttct aggccaaacta tatctcaaca ttccatggtc actcgtggaa aagctggaat 180  
 attcaaacca tagaaattat tctctgtgag caagcatcca atttttccag ttgaagaacc 240  
 aactagtgta tccaaagcac tacaatgtca tcaatggaag caagccatgt cagaagaatt 300  
 taccatcttc atgaataatg gtacatggtc tctagtcnnc agtcaaccac attntaatgt 360

cattggaaac aaatgggtgt ttcgttttaa aagaaatcca aatggatc

408

<210> 18448  
<211> 419  
<212> DNA  
<213> Glycine max

actatttgtt acctatcttt aactaaaaga acctatagca ctacaaaata accttanaa 170  
gaaggagttt aatadaattt acataagttt tatacacaaa agttagttgt attcatcgac 180  
taacacacac acacacaatg taagtgaaaa tcaactattac accattaagt agcttcttac 240  
tggatcattt tatcccaaaa tccaccattg gatagaaatg tcttgtcata gacatcatgt 300  
gtataaaagt ttcattaat ccaaaacttt gtggtacttt attaatatag aattaaatat 360  
taagattaac atagtatatt agaatacttt tattactttt attgttcaat ttatatgag 419

<210> 18449  
<211> 378  
<212> DNA  
<213> Glycine max

<400> 18449  
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tttttttttt ttttttcatt tgcaagcaag aatacatatg ctttttataa ttggtcgtat 180  
tatatttttt gtgaccaaaa cataggetac catgcaaggg ttgcaaggtc cccaaccttg 240  
gagattgcta ctcttatgga agggacaatg tatttttatc agaagacatg gagatgtatt 300  
ggagccattc aaatatgccg gctatcccat gttgctgagt gctgttactg tggacaagga 360  
tgacaacaat tttctttt 378

<210> 18450  
<211> 388  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18450

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tatataatga agtactcata catgtaggta actgtaattt gaaattattt aaacgttctt	180
atctatct atgtgatttt tcttttattt ttgtgtatgt tcttgatttt atgtgtttat	240
atgtgttttt tctgtgtttt tctgtgtttt tctgtgtttt tctgtgtttt tctgtgtttt	300
atgtgttttt tctgtgtttt tctgtgtttt tctgtgtttt tctgtgtttt tctgtgtttt	360
tatacacctg cacatcttag taaaaata	388

agcttatttt ttcttggttg aaggaccaag ttaaaaacct tttyaacatt tnttcagct	60
tgctgatcta tctcctctgg tttccttccc ttctcttttg gtttaatctc agccaccct	120
gactcttcac tntcagataa ggtagctgaa gttaaagaat caccttttaa ttttaatttg	180
tgaggagaat tgccagccaa acgtctgaca aatcccaacc caagatcatt atcagtcaca	240
tcagatacag aatctaaagc aggggagtc tcatctacttg atacaatggg cacaaaattg	300
gttcttcttg cagtaaggga gctctttingt ggctcttgcc agtggacaac aggtggggaa	360
gatgatcgtg cggatgccac a	381

agcttccctat ttatttaaagt tcttctccaa aactgtccta agcaaaagtc ccaaagtcct 60  
attaacaact tccgtttgnc caccggttgc tgggtgacaa gtgggtgaaa ataaacaattt 120  
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cacatgggaa gcatcatcaa tttttttaca tggaataaaa tgagccatct tagataacct 300  
atcaacaacc acaaaaaatgg aatctctacc attgcttggt gttggcagcc ccaaaaacaaa 360  
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<400> 18400

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ttatgaccat ttgaatttct cgagagcttt cgatgtttta ttttgagcgt ctgatataa 180  
tataagcctg aatcggacat cagtgtgaaa acctatgacc attttaactt ctggagagct 240  
tcgcttgctc atttttttagc gtctctatat gtgatgcgca tgagttggac atccagagta 300  
aaagttatga ccatttgaat ttctcaagag ctatgcgtgt tcaatttcca gcgcctcgat 360  
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<210> 18454

<211> 422

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 18454

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ttagaatatt gggactgagc ttggttcaac tgagtagcct tctgccttat ctgatttgtc 180  
ggactctgaa tggaggctct tgtctcttgc tgaaatttca tattctggat ggtcatttgc 240  
cttactaact cctctatgga aggttgagaa ggggcctcag atgcttgggtg tctttgttgt 300  
tggtactgca ttggaggagg aacatatggc cttcttggac caacaacatt ctggaagggg 360  
gggataggct cgtgntctac tgatgttggt gtggaggatt ttcccatctc acatttggat 420  
ga 482

<210> 18455  
 <211> 427  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18455

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 ataaagactc tgggtctcttg ctgaaattgc atattttgga tggtcatttg cctcactaca 300  
 ctctcaagga aagttgagga ggggccttag ttgcttggtg tctttgttgg tgttgcctatt 360  
 ggtgctgcat tggaggagga acatatggct tgctntgacc agcaacatto tgganaggag 420  
 ggaatg 427

<210> 18456  
 <211> 457  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18456

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 cattggatat tttctcaaat gtatcttcat ccaccgattg ataaatgaga aagagagctt 120  
 tcttgtctct cttctcttgac tcttccaacg tctcatttac accttggtt agcgaggctt 180  
 catcttgctc ctogaagcca ttctctacga tateccacac atcttgagct cctagtagcg 240  
 ccttcattct gatactccaa ttatcatagt tgttctttga gaggatcgac atttggaag 300  
 gaaaacctcc attggccatc ttttgaggat cttgaagctc tgataccact ttgctggata 360  
 taaggctctt tatgtttacg acaaagtgtt acgaatattg gagactntga atagacattt 420  
 gataggaacg agaattcttt atggagaaga gaacttt 457

<210> 18457  
 <211> 388  
 <212> DNA  
 <213> Glycine max

<223>        unsure at all n locations  
 <400>        18457

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agcgtgtttaa tttttatatg tagaggcaat acctatnagg gtactagtgt gaggagccca   60
atgacatada gacccgcaat acttctgttg tcaaaaadaa gtaaacatgc ctcaaacaa   120
tctctgtgtt tttttgtgtt tttttgtgtt tttttgtgtt tttttgtgtt tttttgtgtt
tctctgtgtt tttttgtgtt tttttgtgtt tttttgtgtt tttttgtgtt tttttgtgtt
atgggatctc ctatagcagt ttagagactt tatccatgtg tctga'glac cccctttaa   180
ggagagactaa gagctctgaa gattactact gagtagttag gagatatcag atacggccaa   240
taagctgata cttttctgaa gactaaca                                     300

```

<210>        18458  
 <211>        419  
 <212>        DNA  
 <213>        Glycine max

<223>        unsure at all n locations  
 <400>        18458

```

agcttttgctt ctacttttta taccactaa acgtcaaaca agattccctt catgacaaaa   60
aaatgttctc tctaactctt agtcacaca aatgtagaga gaccacata atagttaagg   120
gagtgaatc ttatttctct catcttccaa aacattaaag tacatctgag agaagcttca   180
ctatgactca ttatttatat atttattatt tatgacaatc ataggtttca agatccggtt   240
gattttctat cattgatcat ctaagaaact cttanaattt ttacatgtga tatcggaaca   300
tagattatca acattatgat tctctaataa tgatttatte tttctcaatt atgaatgaat   360
cctaattatc aaatgtaaaa atcttatttt cttctgcggc tatgtatgat atgttatta   419

```

<210>        18459  
 <211>        414  
 <212>        DNA  
 <213>        Glycine max

<223>        unsure at all n locations  
 <400>        18459

```

agcgtgttgt taattcaaac aggaataact ttgtactcgg atgtctcaat atgtcccgta   60
atatactgag atgcttgaaa ttgaaaacgg aagctcgtag catatgcaaa acacaataac   120

```

tttttactcg gatgtccgat tgtgtctcgt agtatatcga gacgctcgtt attaaaaaca 180  
 taacctcgta gcagattcaa acgaaaataa ctatttactc gaatgtttga ttgtgtccca 240  
 tagtatatcg agacgctcgt aattgaaaac agaagctctt agaagatttt aacgacaata 300  
 actatttact cagatctcgt attgtgaccc gtaatatatc gacagcttgc aaattgacga 360  
 agtctctctcgt ggtgtgtctcgt ggtgtgtctcgt ggtgtgtctcgt ggtgtgtctcgt

<210> 18461  
 <211> 432  
 <212> DNA  
 <213> Glycine max

<400> 18460

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 aagcatttaa atttattgac ctggaggata tgatcacttc atcatgtgtt gattagcata 120  
 tcaatagttt gcatatggtc actgacaatg ctttatccca ataactaaaa tgaagaataa 180  
 cttcatatga cttgtcctgc cagtattgtt gatgttgaga tcaagcctgt ggaagggtgaa 240  
 ctttctaaat cactgtttga aaacaacaaa tgctatttac tggactgtgg tgctgagggtg 300  
 tttgtctggg ttggctcgtg gacacaagtt gaagaacgaa aatcagcctg ccaagccgtt 360  
 gaggtaaggc cattgtagaa tctataatct aattcatttc catttgtttg ttaaattgga 420  
 ttcattaatt ct 432

<210> 18461  
 <211> 432  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18461

agctntgacc tcatttctat tattctctat tcttgggtca ttgtatacaa gttgggcaag 60  
 cgtgggtctta cccaacccgt ccattgcccac gatagaaagt actgacagct tgttatcagt 120  
 gttagaagtg agccagttta tgataatttc ttatatccac tctctgcccac aaatatcact 180  
 ttaaccactt gaagatgttg attgtggcac tttaacacaa gatcctgata caactacaag 240  
 atactacac cttttcaaac ctaqattatc catcccgctt gcaagtacag gtttgagatt 300  
 cagattgagg ttgaacttgg agtctggagt gttgtatttc atccaaacaa tctctacgt 360



caagcatggc aactntgagc ttaataagcc agtctctcac ttgcataatt ccaaactggt 420  
 ttgtttcagc at 432

<210> 18462

<211> unsure at all n locations  
 <400> 18462

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 tggattanga gtgtcaaaact aatgaattgg ataatttttt tgaattgaaa tggatagcca 120  
 atccatttat gatccattaa taatgtattg caaaaatcta atttatccat aacttatttc 180  
 atagaaaaag gtccatccat tatattttat ttttttcaaa acaatatattt tctaaaaaaa 240  
 agtgaatat ttgtacaaat tcttaccatg aaataccata gaatccaata tttatctcat 300  
 aaagacctat gtccaagtaa tgaacttgga actacttgat tcaactggatt gcaaaatatg 360  
 ttggatgggt cattatctat ccaataacaa atggtaatcc aattcaacta atgtanttaa 420  
 gtttattt 428

<210> 18463  
 <211> 442  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18463

tgttagggta aagtctcatg attgtcacgt gtcctatgta caattgttag ccgnggctat 60  
 acgagacatc ttgccaaaca aagtcagggt agcgataact cgctgtgct ttttatcca 120  
 tgcctatagt agcaaaagtc ttgatccgtt caagtttgat gagttggaaa atgagggcgc 180  
 aattatactg tgccagatgg agatgtattt tccccctgct ttctttgaca tcatgattca 240  
 ctgtattgtg catctgggtc gagaaatcaa atgtttggtt cctgtttatc tactgtggat 300  
 gtaccgggtt gagcgataca tgaagatctt aaaaggggtat acaaagaatc tatatcatcc 360  
 agaagcactt atgtgtgaga ggtacattgc agaagaagcc attgtcaattt gtccaataa 420  
 cttatagaat gctaaacctg tt 442

$\frac{1}{\sqrt{\pi}} \int_{-\infty}^{\infty} f(x) e^{-x^2} dx = \frac{1}{\sqrt{\pi}} \int_{-\infty}^{\infty} f(x) e^{-x^2} dx$

<210>	18465
<211>	426
<212>	DNA
<213>	Glycine max

tgtagggtta aagtctcagc attgtcacgt gtagtatttt ataattgnca gncgaggcta	60
tacgagacat cttgccaaac aaagtcaggt tagccataac tcgcctgtgc tttttcttcc	120
atgccatatg tagcaaagtt gttgatcctg tcaagtttga tgaacttgaa aatgaggccg	180
caattatact gagccagttg gagatgtatt ttccccctgc tttctttgac atcatgatcc	240
acttgattgt gcactcggtc agagaaatca aatgttgcgg tcttgtttat ttgcggtgga	300
ngtacctggt tgagcaatac atgaagatct taaaagggtg tacaaagaat ctatatcacc	360
cagaagcacc tattgggtgag aggtacatta cagaagaang ccattgaatt tgttttgaat	420
atattg	426

— — — — —

<223>        unsure at all n locations  
 <400>        18466

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ctctgaaga acctccagat ggacatcata cattctgctt acttcathcn agataatgcag   60
ctaaagcca cattaactgc ggaatgtctt ggaactacaa acagcttaad ggcattgcta   120
ggaatgtctt ggaactacaa acagcttaad ggcattgcta
ggtatttcca tgggtgacta aaaaatatt tttatattt aggt gatta cctattt
gaaagccat taagaatgtc ttaactggta ggcatagggc ctacttgc caagagagtt
caccacagag gatcttctctt gcttccaata gaagctcacc cacaaccat a          351
```

<210>        18467  
 <211>        393  
 <212>        DNA  
 <213>        Glycine max

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agcttgtggt tttctgcgct gtcattagtc aactctgatt tttattgaat aaaacattat   60
tttgggcatt agatcaaagt atctgtcgtt cttaaatttt tttaaactaa acaaattata   120
caataagttt tttattttgt acagaacaag aagtggctaa aaatattatt atttttttac   180
taaaagaagt tggttaaagta atagaaatca agttattatc attcagatgt taaaaaaaaa   240
ttttcaaatt aaactcttgg gaacatttgg ttgagttgag ctgaattttt ttcttatttg   300
aaaattatga tttcagaaga atttgattat tgaaaattat gattcatgta taaatatatt   360
tgattagttc taacataatt attggaaatt aaa                                393
```

<210>        18468  
 <211>        419  
 <212>        DNA  
 <213>        Glycine max

<223>        unsure at all n locations  
 <400>        18463

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acactgtgct cggcccaatt cgncaagcaa ttcactattg gtcctgaatgg ggaagcctgc   60
cttgatgggt agtgagttca acgcacgata atctacatag aagcgccacg ttcctgtctg   120
cttcttgacc aagaggaccg gagaagagaa cddctcttta ctatcttata tcaagccttt   180
ctgaagcatg gctctgaactt gctgctcaat ttcctgtttt tgaaaatctg gctatcctata   240
```

cggacggaca ttcaccggag tagcttgagg taaaagggtga atatgatggg ctgttggtgcg 300  
 ttccgggtggg aagggtttgcg gttgtcggat aaggatatta tatctgggtga gcaaagcttg 360  
 aatggatggg tccacggggt cagatgaagt cgaatgttct ttcgagagga ctgtgatat 419

<210> 18469  
 <211> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18469

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 gttggacctc ctagaagagt atggagtcag caccactttt aacattttctg atttaattcc 120  
 ttttgacagt ggagctgata ttgaggagga ggaactaaca gatttgaggt caaatccttt 180  
 tcaaggggaa gggtatgatg caatcctccc taggaaggga ccagtcacta gagccatgag 240  
 caagaggctc caagaggatt gggctagagt tggctgaagaa ggccctangg ttctcatgaa 300  
 cctcagggtg gatTTTTgag tccatggggc aagtttgggt ccaattctct ttgtacatat 360  
 tagactanga tgtcattata tntgatcctt gtattt 396

<210> 18470  
 <211> 437  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18470

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 tottaagaag ggggggttga attaagatat tccaaactgt ttccctaat taaaaatcta 120  
 tttctctttt tactcaagtt atgaattccc ttaaagacaa tcttctttaa tattaattca 180  
 aacgaagcaa ctggaatgtg aatataaagc aataataaat aaaagagatt aaggggaagag 240  
 aaaatgcaaa ctcagtttta tactggttcg gccacacct tgtgcctacg tccagtcctc 300  
 aagaaacctg ctgagaggtt ccactaactt gtaaattctt ttacaagtt ctaaacacac 360  
 aaggacatc ctctcttctg gtttagagat cctttacaac aagagactca cagctcttta 420  
 atccctttag agaatga 437

<210> 18471  
 <211> 417  
 <212> DNA  
 <213> Glycine max

ggactcaatc agacatccga gtaaaaactt atttctcgctt caatttgctc tgagagttca 180  
 gaattgaatt tggagcgtct agatatatta cgggactcaa tcaaacgtct gagtaaaaag 240  
 ttattatcgt ttgaattagc tgggaacctc aaaattcaat ttgagcgctc tggatatatt 300  
 acgggactca atcacacatc tgagtgaaaa agttattgtc gtttgaattt gctgaaagct 360  
 tcaactttca atttcaagcg tctcgatata ttacaggact cactcagaca tccgagt 417

<210> 18472  
 <211> 432  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18472

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 catattctag acgtgaagag gcacaagctt gaagacaaga ctatacgagg tatcttcctt 120  
 gggatagca atatctctaa gggctaccgt gtctacaact tgcaaactaa gaaactcatc 180  
 atcggtcgag atgttgaagt tgatgggtac gctntttgga attgggatga agaaaaagtg 240  
 gagaagaacg ttcttatacc tgctcgacta tctcaagaag aagctgagga agaagatcca 300  
 ggtgaaccac cttcactct accataacaa caagatcaag aactagcatc accagagttt 360  
 actccaagac gagtaagatc ttgggtggac atgtatgaaa cctgtaactn ggtcatactt 420  
 gaacctggaa gc 432

<210> 18473  
 <211> 436  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18473

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tcatttccctt tttaatcttt ttcatacaata ttcatatgtt cttaaagaatc tgcaatatca 120
ctttagatct tctctctt tctctctt tctctctt tctctctt tctctctt
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ctttagatct tctctctt tctctctt tctctctt tctctctt tctctctt
ttgagcacia agcatttgca accaaaaaca tgtagatgag aaatattagg tttcttacca 360
ctatataact catatggngt tttctttana atgggtctta ttaaggeect attcatgatg 420
taacatgcag tattga 486
```

<210> 18474  
 <211> 382  
 <212> DNA  
 <213> Glycine max

<400> 18474

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cctcacctta tgaccagaaa tggtagagca aaccactgag aaagttaagt taattcataa 120
aaggataaga actgctcata gtaggcagaa aagttatcat gataagagga ggaaagatct 180
ggaattcgag gttggtgac atgtattctt gagagtcact acatggactg gggttggtcg 240
agcattgaga tcccgaaaac tcacacctca ctttaaagt cttttacaag tcttaagagg 300
actgtgacctg tggcatacca aagttgacta ccccatctc tttctaatat tcacaatgtc 360
gttgatgtgt ctgaacttcg ta 382
```

<210> 18475  
 <211> 386  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18475

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aacatttat ccttggaaaag cagaaaaagg tcagtttctc aaggttaggg aagactctga 120
```

aagctgaaaa gctagaattg gtgcacacag atgtttgggg gccagcccca gtgaaatctg 180  
 ttggaaactc acgctattat gtcaccttta tggagcactc taccagaaaag gtatggggtt 240  
 attttcttaa aaataaatct gatggtttct ctgtgtttta aagytggaaa acagaagtgt 300  
 aaaaacagac aattgaaag gttaaaactc tgaatctcga caatgggggg gattatgata 360

<210> 18476  
 <211> 379  
 <212> DNA  
 <213> Glycine max

<400> 18476

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 atgctagcaa ttccataaag gtcaaaatgc ttgtgggtga ccataacttc ttattgcagg 180  
 gcactatgtt ccgatgtta ttgtggctgc attaatgga attgtaactg gttgggtgcac 240  
 aggcctctta atgcccataat gtgggcattg gttagccagg tcatccatct tgcaatttct 300  
 gctacatctt agtgtgtttg ctttggcatt atcatctcag ttctttcctt acactatgtc 360  
 tgcgcctaag aggattgttt ttcagcata 389

<210> 18477  
 <211> 379  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18477

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 gaggagaata attctaggat tttagaattt cagtttttat tactgttcat gcacactgtt 120  
 cacttagaat aaaattcatt ttttgcaaat catctctaatt ccatacattt ttaatatata 180  
 tgcctttttt attttctttt gatatacttt gtgctttaac gatttgaatt caatatgatt 240  
 ttgtttatca attatttttg gatttgtaca ttacttatac gaaattttat aattttcttt 300  
 ttttagttag tatttcaacta ggttttaaaa taattaatla atcaagaagc tctntaaata 360  
 gacttttaaa taggctcgt 379

<110> 18478  
 <111> 386  
 <112> DNA  
 <113> Glycine max

<114> 18478

atgacatgaa atttctgt gttctctat atttctat ttttctat ttttctat  
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 aagatgcagg tcttcaactgc ccagtatgct ttgagctcaa tctacactgg aagatgacat 240  
 gcttttccat agacaacgcg ataaggagac attctctatgg gcgctttgta tgcacatcta 300  
 tatgccaaaa gagcatcagc cctctctatgg cgtcaatctt tactgcttgg ctgcacaatc 360  
 atctctaggc tctctctgat ctctct 386

<210> 18479  
 <211> 397  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18479

ctgcagcttt tagncattct tgtagnagen ccaacgacat ggattctaaa tctttggttt 60  
 cctcgactgc cataacaatg tgcctcaaatt taggatctaa cgagcatagt atcttcccca 120  
 tgattcttac atgctctaaa ttctcaccat gtcttttatac ttgaggtgaa acaacgataa 180  
 ttcttgaaag gaactgggaa atggacgtca actctttcat atgtaatgat atagactctg 240  
 ctatgagcac atgcacagaa acgctcttta gttgacattg gttatcccag cctaccattt 300  
 tacggtggcg cgaacaggcc aatatgatga cgtcgaagcg ttagtctcca agggagaaaa 360  
 ctgacagagt caccaccaac gtgtatttga cgaataac 397

<210> 18480  
 <211> 374  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18480



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 aagacagggt taagaagcaa aacctctgca aactctatag ccttctgcaa tgcagaagca 180  
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 ccttctgcaa tgcagaagca aactctatag ccttctgcaa tgcagaagca 360  
 ccttctgcaa tgcagaagca aactctatag ccttctgcaa tgcagaagca 420  
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<110> 18481  
 <111> 358  
 <112> DNA  
 <113> Glycine max

<400> 18481  
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 tetacatgct tagttctcat gacatacaag attagacggg atgtgaagag ctgcctgact 180  
 atcagaatac aacttcatct gtggaacatc aaaaaattgt aattcttgaa gttgtttaat 240  
 ccacacgaat acacaagtaa caagagccat agctctatat tctgcttatg cacttgatcc 300  
 agcaacaaca ctctgttgct tgctttttcca atagacaata ttcccaaaga ggatacac 358

<210> 18482  
 <211> 441  
 <212> DNA  
 <213> Glycine max

<400> 18482  
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 gtttgaatcc ttacatatga aagagtcgga gtccatttct gattattttt caagaattcc 120  
 cgtagtttca aatcaactag aaagaaatgg tgagaagtta aaagatgtaa gaattatgga 180  
 gaagatacta tctctgttag atcccaaatt tctgcacatt gttgtgacaa tcaaggaaac 240  
 taaagattta gaaactaga tgaagaaaaa aactcaagga tcaatgcaag cttaatgagga 300  
 gaagcataag aaaaagcaaa agatcactga gaaaatcttc aagatgcaac taaaggagaa 360

cgaagatagt cgaggaaatg agagaagtca acgaggtgga ggtcgcggtt gaagataggt 420  
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<210> 18482

<211> 18482

<212> DNA

<213> Glycine max

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agaagaacaa gaaatccac acatactatt gtgataaata ctagaattaa tggctttcta 180  
catatacata tatacgtcat tacaacgata cttatcaact gtacgaaaga atgaaacttc 240  
ttagaagtca taatatgaag aaatcaatat gtctagatac ccccttttct atggacaaaa 300  
gagctaattg ataaaggaag catcgtactg atccattaac ggcggtttga accgatacga 360  
taagaactgc ttacttatct catga 385

<210> 18484

<211> 391

<212> DNA

<213> Glycine max

<400> 18484

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acagcagaat aattatgacc tctccagcaa cagatacaat cccggatgga agaatacct 120  
taatctcaga tggctctagcc ctcaacaaca acaacagcag cctgctcctt ccttcacaaa 180  
tggttctggc ccaagcagac catacattcc tccaccaatc caacaacatc aacagcccca 240  
gaaacagcaa aaagttgagg ctctctctga accttccttc aaagaacttg tgaggcaaat 300  
gactatgcaa aacatgcagt ttcaacaaga gacagagccc tccattcaga gcttaactaa 360  
ccagaatggg aaaatggcta cacaattaaa t 391

<210> 18485

<211> 340

<212> DNA

<213> Glycine max

<400> 18485

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ggaagacgtg ggactaaggc ataccataac accccagtcg ctatcactag ctgaagactg 120  
.....  
.....  
.....  
.....  
adagucacat gcaggaggcc caacaacaga tctaggataa 340

<410> 18486

<411> 425

<412> DNA

<413> Glycine max

<423> unsure at all n locations

<400> 18486

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cttaagaagg ggggattgaa ttaagatata acaaactatt cccaattaa aaattctact 120  
tttaacttaa cccaacaatc caagattcct tttaacaag aactcctaga taataatgca 180  
aattaatctt actaaataaa aaataataag caataaacag taaaggagtt taagggaaga 240  
gaaaatgcaa actcagattt atactggttc ggccacaccc ttgtgcctac gtccagtcgc 300  
caagcaaccc gcttgagagt tccactatct tgcaaaatcc atttacaaga tctgaaccac 360  
acaaggacaa cttttctttt gtttcagatt tctttcaaca agaggccctc ggtctcttaa 420  
tcctt 425

<210> 18487

<211> 338

<212> DNA

<213> Glycine max

<400> 18487

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agctctgata ccaattgttg gacaattggc ctacagaaac ttaagaaaga gggggtttaa 120  
ttaaatcttt acaaaactatt cctgaattaa aattctctata tagatttga cccaatcct 180

aagattcctt ttaaaatgaa ttcttaaata ataattcaaa ttaaacttac tgaatagaaa 240  
 taataagcaa caataaataa aagagtttga gggaagagag aatgcaaaca cagttttata 300  
 ctggtttggc aaagtccatt gcttaagttc agtcccc 338

<223> unsure at all n locations  
 <400> 18488

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 ttageccaaac caatcatctt caaggacttc atttctata ttgggcaatg agaattggaa 120  
 aaagtgagag agtatttttag tgaagacaaa agcttggaga ttgaaataag attgaatttg 180  
 aagtttggaa cataaagaac atcatgtat atgaaatgtg gcgataactg cacatttctt 240  
 gaaatatgag caaaaacaat ggaaccattg ggtaagtgga tacgcacagg ttgtattttg 300  
 gaaaagctta caaaattatc aaaggaacat gtaatgtggt ctgtggcccc agagtcaata 360  
 atccaggggg tgcaattaga aaaacaatgt gcagtgtgtg cattagacaa 410

<210> 18489  
 <211> 357  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18489

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 gaaggtctct tatgtattta ctttgagtta gaagaataga gccatcaatt agagtcttga 120  
 cttcaaatcc caaaaaatag tccagcttcc caagttgttt aagtgaaaaa ttagaatgaa 180  
 gtttgataat aaattgttgg actaagttga tagaactacc agtgattata atatcatcaa 240  
 catacaccaa aagataaatg atatgagagg tatctttgaa aaaaaagaga gatgggtcac 300  
 acttgcttgc agaanaacca agatgcaaga gagtagattt tagctgttca aaccact 357

<210> 18490  
 <211> 388  
 <212> DNA

<213> Glycine max

<400> 18490

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gaagaagaat ctgctatcca cctcagctca aaaacaacac caagccttca ctttgcctca 120  
tgcctatcca cctcagctca aaaacaacac caagccttca ctttgcctca 180  
tgcctatcca cctcagctca aaaacaacac caagccttca ctttgcctca 240  
tgcctatcca cctcagctca aaaacaacac caagccttca ctttgcctca 300  
tgcctatcca cctcagctca aaaacaacac caagccttca ctttgcctca 360  
tgcctatcca cctcagctca aaaacaacac caagccttca ctttgcctca 388

<210> 18491

<211> 306

<212> DNA

<213> Glycine max

<400> 18491

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tgcygctacg agagctcgat tgcgcacctat agagagccgt acgtcaacac actgatcgct 120  
gttttactgc ttaaagactg atacaatcat aacttcacac aacatactag ccttacacat 180  
catggttatt tctcagctg cctaattagc gaacatgctc acactaatcg ccttcgcta 240  
actgtgcgca ttctaaatgg caaacctctc ctgacacctg atttaatgat tacgcctacg 300  
cgaacc 306

<210> 18492

<211> 236

<212> DNA

<213> Glycine max

<400> 18492

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ggaaagagtg atacgatcat gacgccacac aacatactag ccttgcacct catggtctct 120  
tcttgaggcg cctaattagc gaacatgctc acatcgatcg ccttcgctc actgtgcgct 180  
ttctdaatcg caaacgctcg ctgacgctcg atttaatgat tacgcctacg cdaagc 236

<210>	18493
<211>	420
<212>	DNA
<213>	Glycine max

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atgacggatt	tcaacctgccc	tcaattcagc	aaacatctccc	attctttgta	180
tacaaaggag	tttgctccta	ctagaggctt	gaggcaaggg	gatacttttag	240
tttcaatata	gttgagagaag	gcatacaggg	attgatgagg	gaagcagttc	300
atacaaaaagt	tacatggttg	ggaagacaaa	ggaaccatt	aatattttac	360
ttgacacagtc	tttggtgggtg	aagctgtttg	ggagaatgtc	ttagtttgat	420

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<.223>      unsure at all n locations
<.400>      18494
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aacgcacgat	aaagtgtcaa	atgaagaatt	gaagctgcag	gattcacgat	gtcggataca	180
atgtccagga	cactctgccc	gaaaatactg	gagttgctga	aagcattgaa	gctgcatgat	240
ccacgatgtc	ggacacgatg	tectgacatc	cggcccgaaa	atactggaca	tataaatctg	300
ttatatcttt	aacagattat	tgtgcagtta	gcaagagatg	agatgatcta	tcttttaggaa	360
ggaattanaa	gataattaaa	gctcgtatta	caaaactaaa	gagtcgttca	gggatgaaag	420
at						422

<223>        unsure at all n locations  
<400>        18495

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tccttgagaa tcttctttga gaagcttctt tgagaaacta gagcttagct acacataaac    60
ctttaatagc taagctcacc tctttcagat gagaagctag agcttagcta cacacacccc    120
ctttaatagc taagctcacc tctttcagat gagaagctag agcttagcta cacacacccc
ctttaatagc taagctcacc tctttcagat gagaagctag agcttagcta cacacacccc
aaatcttctt gctcctcacc agcttcttct tctcctcacc tctcctcacc
aaccttggcc catgggctca gaaactaccc tgaggttcat gagaatctta gggccttctt    360
cagcagctct aacctacntc ctttggagcc                                        390
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<110>        18496  
<111>        424  
<112>        DNA  
<113>        Glycine max

<400>        18496

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tctttgacca ccaagaaact aaatttgagc caaaaatgat ggctgcacca gaagttgacc    120
ttctgttgtc atcatcacag taagcattaa ctgtaaaggg aggtccagta gaaggaggga    180
gaatcttcca accaaagtgt atggtaccag ctagatacct gagaattcgt tttactgctg    240
cccaatgctg ctacgttggg tctgacatgt actggcagac tttgttaaca gtgaaactga    300
tttcaggctg agtgatgggt gcatactgca aggctccac aataaacctg tctagagtgg    360
ggtcaggcaa aggtcctac cctgacttag ttaacttgaa gcctcaacca ttggagaaga    420
aata                                                                        424
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<210>        18497  
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<212>        DNA  
<213>        Glycine max

<400>        18497

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actttcacc ctatctcacc atgtctaaaa ccttttaatg gaagtcatga aaatcgaagg    120
ctctcagaag catctaactg aaaccaagtt catgatcgcg taaaggaagt tctaacctgt    180
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ttggaagat cccagaagaa gacatcatct cccaacaaca tgtggaagaa atgctcaata 240  
 ttttgatct tccatactgg tctgatctat atgtgcactg tctagatgtt atgcatgtgg 300  
 agaaaaatgt ggtgatagt ttaattqgtt ctctctctaa cattaaaggg aagacaaaag 360  
 ttttgatct tccatactgg tctgatctat atgtgcactg tctagatgtt atgcatgtgg 420  
 agaaaaatgt ggtgatagt ttaattqgtt ctctctctaa cattaaaggg aagacaaaag 480

<210> 18498  
 <211> 412  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 18498

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 ttatgagcta agcttaacgt gaattaatct tttttaatc catataaatt gaacacaata 180  
 ccataaattt ataacattca tatattctac tcaatcaact gaactaaaac cactgataac 240  
 taattttaat aaaatgatca tttattttta ccaatttcac agaaaaactt ttgactaaga 300  
 aaatttaact taattgggtg agcatgtgtg aattgctata nactactagt tatgaacata 360  
 aatatgttta taataactta tgcattgtgt tccaatgtat ctctgtataa ac 412

<210> 18499  
 <211> 415  
 <212> DNA  
 <213> Glycine max  
 <400> 18499

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 gagggtgtt accatggcca tgcctgacct tttcttggtt aggcaggtag tggagttgcc 120  
 aactnaggac tccctgattc tcccggtgt cccaaagctg ccacttttga aacctttaca 180  
 ggcctctaca atgacacga ggccattgag aaactcttcg aggcacaaca aggagaaatt 240  
 ggcctagttt tccctgaacc tcttggttga aacgtgtgtt tcaattttcc taagcctgat 300  
 tttcatagtt tcttgctcaa catcaccaag gaaacaata cctctcttct gttgatgaa 360



gtcatgactg gatttgcgtc gtcatatgga ggtgctcaag atattttggc ataac 415

<210> 18500  
<211> 415  
<212> DNA  
<213> Glycine max

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caatagacct cctcaacctc aacatcaaaa tcagccacaa cagaacaatt atgacctctc 240  
cagcaacagg tacaatcccg ggtggaggaa tcctcccaac cttagatggg tgaatccttc 300  
acaacaacag caacaacaac aataacctta ttttcagaat gctgctggcc caagcagacc 360  
atacgttctt ccaccaatct agcaacaaca acaacaacac agccccaaat ataga 415

<210> 18501  
<211> 199  
<212> DNA  
<213> Glycine max

<400> 18501  
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gtgaattttc caaccgtgaa tgactctaac accacctctg ccattcattg acttcatgcc 120  
tgtcaccatc cgatgtccac atctttgatg ccttatcccg acctcatctt ctgtgcagaa 180  
tacacgtgct gctgaatta 199

<210> 18502  
<211> 381  
<212> DNA  
<213> Glycine max

<400> 18502  
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tcaaatggag aatagagatc ataatagaaga agaaaggagg agaagaggga atgatgggtg 120  
tcttagacaa aaccgaattg atgtatttaa actcaacatt cctccattta aadgaagaaa 180

tgatccggag gcttacttgg agtgggagat gaaaatagag catgttttct catgccacaa 240  
 ctatgaggag gaccagaatg tgaagcttgc cgccacggag ttttccgact atgctcttgt 300  
 gtggtggaac aagctacaac aggagagagc aagaaatgaa gagccaatgg ttgatacatg 360  
 gacccagatg aaaaatcat a

<210> 18503  
 <211> DNA  
 <213> Glycine max

<400> 18503  
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 ttatccaagc acaaacttca agccttattc catgtattgg ggggaagtta tggtcggcca 180  
 tatgggtaga ggtgtcatag aggagcaagt atggaggaag gacacttgga ctgctgaaga 240  
 ggacaggttg cttgctgagt atgtcaggtt gcattggtgaa ggtagatgga actctgttgc 300  
 tacgcttgca agtaagaaac accaaacttt attcactgtt ttgtttctta atatatatga 360  
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<210> 18504  
 <211> 411  
 <212> DNA  
 <213> Glycine max

<400> 18504  
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 aaatactgca gtggtctata gggacaactg aattgatgca gggtaacctg ctgttggaga 180  
 aatgtacgca atgccaattc aagagcatta acatatctga gctttttaat ttgaaatcca 240  
 aattgagttt ttattaatgc aaaaaaatcc ttaaccttat gagttgcttc actcttagta 300  
 tggagcaggt aaattcagtt taactacta tagtcacca caatgggtgag aacataaptgc 360  
 attccttgac ctgtgactgt atgataagga ccccatactc cacatgaatg a 411

<210> 18505



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gattatctga ctgtacagta aaaaacagat tatttcgatt ctttctgttcg gttttaattt 360  
agttgaatct agattttttt gaattcataat aattctttatc ttttgaaatc ctcttaacac 420  
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<210> 18508  
<211> 319  
<212> DNA  
<213> Glycine max  
<223> unsure at all n locations  
<400> 18508

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tggatgccta ctccggatac aactagatta gaatgcctcc tctagatgag gagaaratga 180  
aattcataac taanaatgtc aacttttgtt acaaggtcat accattcggc ctaaaaaatg 240  
caagcgcgac attccaatga ccaatggacc gagtcttcaa caacagatcg gacgaaatgt 300  
caggtatata tggatgaca 319

<210> 18509  
<211> 436  
<212> DNA  
<213> Glycine max  
<400> 18509

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ttaaactcctc tgaacgcact tggagtgctc tttcagtcac tccacccaag tgcccagaga 120  
attttttttg caaaaatttg tggaaagggaa aattcatgac agagcatgag ggagatatata 180  
taqtaattta tacatgttct agtgaaaatc ccattatttt taagctagat cagatgttaa 240  
tggaaatggga agagatgaca acactggatu gagtaactct ttttctagct tctttgtctt 300  
ctcatgcaag gattgacttc ccgggaataa tgagaaatag tgtctacttc tctaaagttc 360  
gtctttatgg aaagcgttcg atatcattct ctcttcatga ctctagatcc tctctctcta 420  
agcagtgcca tgactg 436

<210> 18510  
 <211> 356  
 <212> DNA  
 <213> Glycine max

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 gcacgactat ntgaaggaaa gactatcttt gcatactaata ggttttagtaa gtgggtggatga 240  
 attttctcat atccgatgtt gtgtcacat tttaatcctt attgtcaaga aggggttgaaa 300  
 gtagtggttc ctgctataaa caacattaga gaaatcatta agtatgttag tggatc 356

<210> 18511  
 <211> 372  
 <212> DNA  
 <213> Glycine max

<400> 18511  
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 ttcacattgt ctgctccacc atgaaacccc cagatgtcca agaggatcac atatttctga 180  
 aggettttcc tcattcatta gatggagtgg caaaggactg gctgtattac cttgctccaa 240  
 ggtccatcac gagctgggat gaccttaaga gagtattctt agaaaaaatt ttcctgctt 300  
 ccaggaccac agccatcagg aaggatatct caggtattag acaactcagt ggagagagcc 360  
 tgtatgagta ct 372

<210> 18512  
 <211> 409  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18512

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 aaattatcat accttcacat taagaanata taanacacca atgtttttaa gattaaatat 180  
 ttatttccct ttggaatggg atgtgtttaga aagatatgaa taatatattc tgatgttata 240  
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<210> 18513  
 <211> 377  
 <212> DNA  
 <213> Glycine max

<400> 18513  
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 aatttaataa taatgcacta gtgtaaaatt atatatctac atgtaattac aaatagcatg 120  
 acaacataac ttataagcta cttattataa aaattaataa gcttattata tgataatttg 180  
 tgattaaagc taatactgca tagtcttttt tttcttctc tagttatata atccttaaca 240  
 catcctatat tatttcgcta gtaatgtaac agttatttat ttatttcctg ctaatccatt 300  
 ttgcatttta taatgtaaca cgttgcttcc ttccgcttg tccgtatatt tcttcattat 360  
 caaaaagaaa agtatat 377

<210> 18514  
 <211> 236  
 <212> DNA  
 <213> Glycine max

<400> 18514  
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 gatccaaaat cactccttgc gatgccaaa gtccgctatc atgagggcgg agcgattcag 180  
 tggcgcttac ttggcgaccg gctccaatac gtgcctctaa gacgaaccat ggctct 236

<210> 18515  
 <211> 456

<212>	DNA
<213>	Glycine max

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ggtctgattc cccatctccat ggtctgattc cccatctccat ggtctgattc cccatctccat	180
ggtctgattc cccatctccat ggtctgattc cccatctccat ggtctgattc cccatctccat	240
ggtctgattc cccatctccat ggtctgattc cccatctccat ggtctgattc cccatctccat	300
ggtctgattc cccatctccat ggtctgattc cccatctccat ggtctgattc cccatctccat	360
ggtctgattc cccatctccat ggtctgattc cccatctccat ggtctgattc cccatctccat	420
ggtctgattc cccatctccat ggtctgattc cccatctccat ggtctgattc cccatctccat	480

<P10>	18516
<P11>	448
<P12>	DNA
<P13>	Glycine max

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<223>      unsure at all n locations
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ataaatgtta	gcatatttct	cccagggtta	gaaattgatt	ctgagtcctaa	ttatgtttga	180
attacctttg	attataaata	atttattgta	ctcaaaaagt	aatttttact	taaaagtaat	240
tttaggtaac	ttttgtatat	gaaaaatttt	ataccaaaatt	tgactataac	ttgcttttaa	300
gataaaaata	tctaanacct	aagttacttc	acttcaaaaat	cattntttat	aaaattaatt	360
ttatttgaat	tcaatttcgt	agattgatca	cgtytaantt	atagtacctc	aaacatatat	420
agtgagatac	tctangcagc	aaacacaa				448

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>210>      18517
>211>      355
>212>      DNA
>213>      Glycine max

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(1) (2)

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 agaaagatgg ggaaagagag gtattatgta gtacaacaag aagtgggtcaa gttaatggcc 120  
 gcccaattca tcagacaaat taactactcc aattggcttt ccaacatggg catgggtaag 180  
 aaatcctcagaa ctgcaaagac atgaccttat gatattttta gtaagaatgt catacaaata 60  
 tgagttacat tatgaagcat gtcaaaaggg gaaacaaatt aaaaactatt tttcaagcaa 120  
 aaactttggt tccatctcaa gaccacttga actattacat attgatttgt ttgcttcaac 180  
 tagaacaacc tttatcacta gaaggacata aggtctagta gttgtggaca actactcaag 240  
 atggacatag gttatgggtcc ttgctcaaga gaatgagtc tttgaagtct tctttaaatt 300  
 ctgtaaaaag gattctaaat gaaaaaggag tatgcattac ttcaatcaga agtgatcata 360  
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 ctctattgct gaacacctca acaaaa 446

<210> 18518  
 <211> 446  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
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 tgagttacat tatgaagcat gtcaaaaggg gaaacaaatt aaaaactatt tttcaagcaa 120  
 aaactttggt tccatctcaa gaccacttga actattacat attgatttgt ttgcttcaac 180  
 tagaacaacc tttatcacta gaaggacata aggtctagta gttgtggaca actactcaag 240  
 atggacatag gttatgggtcc ttgctcaaga gaatgagtc tttgaagtct tctttaaatt 300  
 ctgtaaaaag gattctaaat gaaaaaggag tatgcattac ttcaatcaga agtgatcata 360  
 gtggagagtt tgaaatgaga gctttcgcta ttatgtaaga gaatgaaanc ttcataactt 420  
 ctctattgct gaacacctca acaaaa 446

<210> 18519  
 <211> 346  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 18519

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 atgatgatta ctgtctcttg gttgtttatg gttatgautt ttaaacttaa ttactttat 180  
 gatatatgat tagtgggtat tactattatt tggttattat gaaagacttt ctggattata 240



tgaacattcta tgaagtatta tctctctaag attgatgaat ggtaagtta tcttgctga 300  
 ttgttctcta ttctcttgta tgaatagtaa tctatgtatg tattat 346

<210> 18521

<211>

<212>

<213> Glycine max

<223> unsure at all n locations

<400> 18521

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 ctatatgaga catcttgcca aacaaagtcg ggtagcgat aactcgcta tgcctctct 120  
 tccatgctat atgtagaaag tcatgatcc tgtcaagttt gatgagttgg aaaatgaggg 180  
 cgaattata ctgtgcaga tggagatgta tttcccccct gctttctttg acatcatgat 240  
 tcaattgatt gtgcctctgg tcaaagaagt caaatgttgt ggtcctgttt atctacggtg 300  
 gatgtaccgg attgagcgat acatgaagat cttaanaggg tatacaaaga atctatctg 360  
 tccagaagca tctat 375

<210> 18521

<211> 437

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 18521

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 taaatctgggt ttgtaaccaa accagccttc aaatggagtt ttttgtgca aaactcttgt 180  
 aggtagbcta ttacagcaaaa atactacagt gtttgcagcc tccgcccata gctccttttg 240  
 caactccttt tcatgcagca tacaccttgt catctccatg atacttctat cttctctctc 300  
 actacacccc atttcttttg ggatgtaagg tacggtgagt tgggtctcaa tgcagcttc 360  
 ttcacaanaa ttatcaanaa catcatntt gtatcccttc ccatgtcag acctttatg 420  
 ttgcaacctg caatcac 437

<210> 18522  
 <211> 318  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18522

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 gaggggagggag gaggggagggag gaggggagggag gaggggagggag  
 gaggggagggag gaggggagggag gaggggagggag gaggggagggag 180  
 gaggggagggag gaggggagggag gaggggagggag gaggggagggag 240  
 gaggggagggag gaggggagggag gaggggagggag gaggggagggag 300  
 gaggggagggag gaggggagggag gaggggagggag gaggggagggag 318

<210> 18523  
 <211> 393  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18523

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 cagaaagccc tgtattctca ngctttcata actctcatat tctggagctc cccatatttt 120  
 gtctcggcgg tcaacttttg tacttcata ttgtagggtg gtcagctgac tgctggtggt 180  
 gtactttctg ctctggctac tctcatgac ctgcaagaac ctttgaggga atttcgggac 240  
 ttgggtgtcaa caatggetca gacaaaggtt tctcttgacc gattatctgg tttcctgctg 300  
 gacgaggaat tgcaggatga tgcaactatc gtcttgccac aaggcattac taacattgct 360  
 atagaaatta aggatgggtat ctttctgtgg gac 393

<210> 18524  
 <211> 404  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18524

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ccatgtgcc a tgagatgcta gactaaatta attgctgatt tggtatcaat caacaacctc 120  
ataggactac aatcccttaa gtgcagttct tccattaaag ctttcagtda tagagcttga 180  
cacgttgcca tagcagcaac aatatattat gctttacatg ttgacaaaac aactacactc 240  
tggtctcttc aacacaaa gattagcttt gttccacatt tttaaaagata tgcagcattt 300  
tctctctctc tctctctctc tctctctctc tctctctctc tctctctctc tctctctctc 360  
tctctctctc tctctctctc tctctctctc tctctctctc tctctctctc tctctctctc 420  
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<210> 18525  
<211> 341  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18525

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aycaggtgca gcaatgtgga tattgtgtgg cccncttgc attgatggaa aaacagcaaa 120  
attgatcttt tcttcaatgt catattgac actatcatgt ccttgactta gaagtatccc 180  
tctcttctct ggctatgtac ccttacgata aaaaattatg cctcaccttg gacctcgaag 240  
actctagtga gttgtcgaag taacaatgtc acaataatca ataggattca cacactcctg 300  
cygagacaac accaccatac tattaaagaa ataatgagca t 341

<210> 18526  
<211> 387  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18526

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acctctgtga gagaccttc agaccttctt ctctaataac ttctgaaagt ggcgttgcca 120  
tggttggggg gcacttacct tgcaaaagca ccaaccatcag gccttctctt gctacctgca 180  
aggggaagct aattgtactg gcagtaaaac ctggcgcgagc ataaagaagt cagatagcac 240  
aaatcaitta tattaccaag tataaaatgt gattaataag tgacacgctg ctgtgaaaac 300  
catgtccgca catcaaatad taaatgctta tctttcanc aaataatca tctatcatt 360

tgtttcatgc aacatgggtg tgtgact

387

<210> 18527  
<211> 353  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations

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tatgataaga gtgttttcaga acaacaaagg tcttatctct tttagaaagaa aaataaatct 180  
atctctctac atattctctta gccaaaactc ttgtgattaa ataaggaatt atttgagtgc 240  
tccaattggt caatctatct ctntatagag agaattcttc ttctctctct ctctcattctg 300  
aaaagggtt aagagaactga nggtctcttg ttgtgaaaga attctaaaca caa 353

<210> 18528  
<211> 356  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18528

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aacggaagct ctcgagaaat tcaaattggtc ataacttnta actcggaatgt ccgattcagg 120  
cgcataatat atcgagacgc tcgaaattga acaacggaag ctctcgagaa attcaaattgt 180  
tcataacttt tcacacggat gtctgattca cgcgcataat atatcgagac cctcaaaatt 240  
taacaacgga agctctcgag aaataccaat ggtcataact ttctactgag atgtccgatt 300  
cacgcgcata atacatagag acgtccaaa tcgaacaacg gaagctctcc aaaaat 356

<210> 18529  
<211> 338  
<212> DNA  
<213> Glycine max

<400> 18529

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tttttttatt ttcagaatgg gaatggtctt aacagctcct ttgtcaatga attttttcat 120  
 gctctttaag tgcagatgto caaatctttg atgcatatt ttgacttca ttttttttgg 180  
 agaatataca tgtggaggag taactggctt ctgaggtgt ccaaggtaac agatgtactt 240  
 tttctctctt gcttttctta gaactgactt ctctctcttt ggaaccaaat ttttgaactt 300  
 ttttttttct gcttttctta gaactgactt ctctctcttt ggaaccaaat ttttgaactt 360

<210> 18531  
 <211> 401  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18530

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 tttagcctaa tttctaatga ttatgcatg ttcatctcac ttattcttaa ataccatttt 180  
 tgttctatg atggggtagt ttttaggttt ctctactagt tcccacacat tgtttctttt 240  
 aaactgattt agttcttctt gcataagcaat tatccaatga tctctatta ttgcttcatt 300  
 tatattttta ggttcaatca gagacaccaa agccatatta ttgcatanat cttaagaga 360  
 atgtctagtt gttacccttt ttgagatata accaataatg t 401

<210> 18531  
 <211> 289  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18531

gaacaacctg cagtcacat gcgtcgggtg agatacagca gccctggacc accaccagta 60  
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 aaaagcttgt ctaggctccc gtttggtaaa tagttgtaaa caatgaggag ttcatcttct 180  
 ttctcgcacc acccatgtaa ctgcacaaa attctatgct ttagtgtgtc catgcttgtt 240  
 atttttgaaa caaatctctt gatctcctgc ctggaatcag gagcaactc 289

<210> 18532

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<023>      unsure at all n locations
<400>      13532
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ctattacaca	acaagtgcac	cattgatcac	tacctaatgt	acaccaacaa	281 aaatggatac
gagagptaat	aaatcatgat	gatatccaat	catatcacca	aat	282
					343

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>210>      18533
>211>      447
>212>      DNA
>213>      Glycine max

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```
<223>      unsure at all n locations
<400>      18533
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gagttcctag cttageccat aatgttttcc agaagtggta attgtcttag tatctttatc	60
tgacacagtg gtccatgca aaccatggag tctcacaact tccttgaaga aaagtttgag	120
atgtgagaag catcatctac catgtggcat ggtatgaagt gtgccatctt gctaaactta	180
tcaccacaa caaagataga gtctacanc ctttgggttc taggaagccc aaggacaaag	240
tcatactaa tgtctaccca aggtgtagat gggatgggta aggggtgtgca tagcctatga	300
ggcatcacc tagacttggc ttgtaaaaca gccacacatc tagtgcaatg cttatgggca	360
tctttcttta tatgggacca atagaacttt tctttgagta agacaagggt cttgtctatc	420
ccatagtggc ccatgagcca cccctcat	447

4210	18534
4211	445
4212	DNA
4213	Glycine max

42200 measure at all 11 locations  
44000 10004

tcaagcttctgt	caccaatcct	tcatgttagac	tgtcccaata	tcttatatta	taccctggat	60
--------------	------------	-------------	------------	------------	------------	----

tcccttttggg tacaataactg gaaggaattc catgcaactn tactacttcc ttaatatata 120  
 actccactag ctctctccatc ctatactnta tattcactgg aataaaatga gcagatntgg 180  
 taagtccgac tactatgacc catacagcat catgtcccca actagtctta agtaaaactag 240  
 atctagctta tctctctctg ctctctctctg ctctctctctg ctctctctctg ctctctctctg  
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 attcagctac atctctctc atgcatctcc accaaaaact tctctctana tctctctana 420  
 tcttagtcat tcttgatgg aaact 445

<110> 18535  
 <111> 423  
 <112> DNA  
 <113> Glycine max  
 <123> unsure at all n locations  
 <400> 18535

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 atatattaag ggactctatc gaacatctga ggaanaagtt attgtcattt gaatntgctt 180  
 ggagcttctg ttttcaattt cgagcgtctt gatatatgat gggactcaat cggacatccg 240  
 agttcaaagt tattgtcgat tgtatctgct cagagtttca gtgttcaatt tcatgtatct 300  
 cgatatacta taagacttaa tcggatttcc gagtaaaatg ttattgtcgc ttgatttgct 360  
 caaagcttat gtattcatat caagcgtctt gaattattat atgcctgatt agacatctga 420  
 gtc 423

<110> 18536  
 <111> 317  
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 <113> Glycine max  
 <400> 18536

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 tgattagaat catcttaatt gtttgagata agttaattcc tataaacata tatatgggtt 180

atatgaataa atgtcttctt tttctcttga aggggcttac aacgctttga taacatgtca 240  
 ttgtgatgtt tgtcgaccag ttttggccac atcttggtgtt ttaaaattat cttatatttg 300  
 aatctttgac attgttaa 317

<323> unsure at all 11 locations  
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 catggtgctc agcattacca aacttggttc aagtcaggtc agcaacacaa aactcctctt 180  
 cagggtgggtc ttgcaaagga atcttcccca cggattcaac tatagccata tccaaaatgg 240  
 cacaaaaacc aaaaaacaca aaaaccttcc ttgctatata tacagaacaa tctagaagtc 300  
 tctccacaaa cactcacatg tccaaaacag ttaaactggt aagcacataa caaaacaccc 360  
 tgaaacaaca aatacctttg agat 384

<210> 18538  
 <211> 326  
 <212> DNA  
 <213> Glycine max

<400> 18538

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 cgaagcagaa cctccatgaa ccatcctgtt tcttaaccaa caaaacagga gaggaaaagg 180  
 ggctagagct gggctgaata aggccttttt gcaacattga atccacctga gactcaatct 240  
 cctgggttttg gtaatgggga taacggtatg ggccggacatt gacccggagg gcttggggaa 300  
 agagatgtat gtggtggtcc gtgtca 326

<210> 18539  
 <211> 325  
 <212> DNA  
 <213> Glycine max



acgtgtgcga ggggtgggggt ttggtctctc tgcctgaccac caccagacc ttngcacttc	60
caggcagcaa cctccacaa ttgagagacc ttgagcttat ccttcagata taccacaatc	120
gagctgctggt cctgctgctggt cctgctgctggt cctgctgctggt cctgctgctggt	180
gagctgctggt cctgctgctggt cctgctgctggt cctgctgctggt cctgctgctggt	240
gagctgctggt cctgctgctggt cctgctgctggt cctgctgctggt cctgctgctggt	300
ttaccaccaatc caacaacagc gacga	325

<.10>	18540
<.11>	335
<.12>	DNA
<.13>	Glycine max

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<.23>      unsure at all n locations
<.400>      18540

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tcaagcggta cgtagagtat aaggagtatc cacaaggggc ttctgaccat gacaagagga	120
cattggtgaa gttggcaact agttcctttt taagcagagg tatectatac aaatganatc	180
atgatatggg cttgctctga tgtgtngaca cttaagaage cgagcgaatg ctcatggagg	240
taccatgaag ggtccttttg atgcatgcta atgtgcatgt catggctagg aagattctaa	300
ggcagactat aactggctca ccatggaaaa tgact	335

<L10>	18541
<L11>	474
<L12>	DNA
<L13>	Glycine max

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. 223>      unsure at all n locations
. 400>      18541
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ataacanac ttctagactt ggagtgatca catgcagtc ccttgaaccc ttaccactca	120
ttctatcatt atgctgagac tcaagaaggc caatagggtt agccttctca atgtattctg	180
acacaaaatcc aatgctctct tctacaatgt acctctcaac aatagatctt ttctaatcat	240

atagattctt tgtataccct ttttaagatct tcatgtatcg ctcaaccggg tacatccacc 300  
 gcanataaac aggaccacaa catttgattt ctctaaccag atgcacaatc aactgaatct 360  
 tgatgtcaaa gaaagcaagg ggaaaatacc tctccaactg gcacaatata attgcagcct 420  
 gatttccaa ctcaacaaac tttacaaat caagaaatt tctacttatg acat 480

<210> DNA  
 <211> Glycine max

<400> 18542

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 aatctgtacc tgtcgcaagg gctcgcggtt tgtgctcttc tcttgaccac catacagacc 120  
 ttgccccttc catgcagcaa cctggagcaa ttgagcagcc cgaagcttat gttgcaataa 180  
 ttccaatag acctctcaca cctcagcagc ataatcaacc acagcagaac aattatgacc 240  
 tctccagcaa cagatacaac cctggatgga ggaatcacc taatctcaga tgggtctagcc 300  
 ctccagcaaca acaacaacag cctgctcctt cattccaaaa t 341

<210> 18543  
 <211> 315  
 <212> DNA  
 <213> Glycine max

<400> 18543

atctctatat ctttaaagg tttcatataa gctttttaaga tatctttggt atctctaaac 60  
 atcttaataa gaagctaaag tatttatattg tattataaag gttattttat tgagaccggc 120  
 atatatcttg ttagactaag atcaatacat gtggtaataa gtttccaagt cttggaaaat 180  
 attatactaa tattttattg agttgtataa agatacttac ttggatatgaa aatcatgttt 240  
 ctttatagctt acaagaataa tatttcggct ataattacat ctgttaatgg ctcaagctaa 300  
 ataattgaac ttgga 315

<210> 18544  
 <211> 400  
 <212> DNA  
 <213> Glycine max

```
<223>      unsure at all n locations
<400>      18544
```

agctngtatt ccttatatct tcttcacaaa tggagtcctt tgcctcttga agatcaatgg	60
tacttgaatg gagaaggaag aaagattatt cgagacacga attcaaggag aagatgagtc	120
cttctctgct tctctctctt cgtctgctt gctctctctt tctctctctt gctctctctt	180
cttctctctt tctctctctt cgtctgctt gctctctctt tctctctctt gctctctctt	240
cttctctctt tctctctctt cgtctgctt gctctctctt tctctctctt gctctctctt	300
tggctaagtg tccacacaaat gggagggaca ttgaatttta cctgatttga attgaattgg	360
ggagccaatt tggagccaaa tttcactaat ttgttaatga	400

```

CL10>      18545
CL11>      442
CL12>      DNA
CL13>      Glycine max

```

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423>      unsure at all n locations
440>      18545

```

ctaagcctcg cgaccagggg tcttcgtaat agaagagaca tacggctatt agcctgtgct	60
tgttcgggaga gatcgtcata catgattaaa gtgtgacgtt cacgggtacat aaaatattca	120
gccagagctg ctctctgtata agggggcgagg tatttgtaatg tagctggaga atccgctgtc	180
tcaggtacta caatagtgtt ttccattgct cctctttctt gttaaagtatt caccacttga	240
ggccacagaag atgctttttg accaatagct acataaacac atattacatt gtgtccctgt	300
tgattgagaa tagtatctgt ggctactgct gttttaccgg ttagtctgtc tacaataatt	360
aattctcggt ggccacgtcc tatggtgatc atcgaaatcaa tagcaataag tctgtttaga	420
gaggetcata tacngaacgt ct	442

. 210>	18546
. 211>	479
. 212>	DNA
. 213>	Glycine max

0223> unsure at all n locations  
0400> 19546

ttaaagctggt caaanaggga aaccaagita aaactcattt caadacatat ttattatttc 60

tacttcaaaa ccccttgatc taacttcacat tgatttattt gggtcccctcna gaaactargag 120

ttttaggtgga aattactatg gcttagtaat agtgggtgat taactaaggt tcacacggac 180  
 tttgtttttg aaagccaaaa atgaagcttt tgatgttttt tgcaaaacttg ccaaggtgat 240  
 taataatgaa aaaaggtctt aacattgttt cacttaaaag tgatcatgga ggtgaatctc 300  
 taatggtt tttttaa tttgttggg tatatggt tttttaa ttttggg  
 tttttaa tttttaa tttttaa tttttaa tttttaa tttttaa  
 taataatgaa aacaaaggtt aacaaaggtt ccaagtaact nttgggctga tgttgaca 400

<210> 18547  
 <211> 335  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 18547

aaaaatggtgt atcaaagagg cgtaatacaa ctttaatgga tatggttagg agtatgttaa 60  
 tcaattagac tttaccgta tttttgtgga tgtatgctt gaaaaactgcc atgtatttgt 120  
 tggacagggt tcttagtaag gcagttccaa agacacctt tgaactatgg acaaatagga 180  
 tacctagtat aaggcacctg catgtttagg gttgccaggc agaaataagg atttataatt 240  
 cycaagacag aatattggat gcaagaacaa tcagtggata tttcattggt tatccagaaa 300  
 agttaaaaag gtatatnatt tattgttcta atcat 335

<210> 18548  
 <211> 383  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 18548

naagcttttt tatgttatgt tgcctttaaa agatgttgac agcatatgaa tagaccagcc 60  
 tctggccata tgttattaag tattaattac gagcatactt aggcctacca aaatttaacc 120  
 taatcaggcc tatttcaacc ggtagttata aatatgttaa attaatttgt aagtctttat 180  
 attatttaatt aaatttaatt aagtctttta attatatatt tcttttatat gagtctatga 240  
 acttgcattt atattttaa taagtcctgt tattcttaatt tagtctcttg ctaagacctt 300  
 attaaatatt agatacaagt ctaacgatct aattgataaa aaagctaaga attattttaa 360

aataaataat agttcaaaga tta

383

<210> 18549  
<211> 408  
<212> DNA  
<213> Glycine max

<220> *Glucanase gene from Aspergillus niger*  
<221> 18549

tctgagaagc cacatgatra ttcattgtcta tctgatgtaa ccccttcctt attgtagtga 1  
ggagccggat ctccaaaagg caaggacaat ccttggccta ggaaatccag tgcctatact 120  
ctagtgtcac gcccagatc tctcagttgc ttctcataat ggaaagagcc aacacccaaaa 180  
ccaggaagaa agagaacatg tggggaatcc acgtttctcac accctgcctt ctcatagtac 240  
aggttaagct taggtctcca tcccaaaaag caactactta ttggagcanc cattgaccca 300  
tctggcagac ctggaatgac aactttgtta gtagcaaggt cttctacccc tgcaatatct 360  
gtacatnct ctccancacc aattacatat ccctgcgaac ttctacta 408

<210> 18550  
<211> 456  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18550

ggattnttt acaggagaaa tatcatttag attttgtgta ttananaata atccgaaaat 60  
ctttgaaata ttacagttc aaataaaatt acattccata aaatgatatt ttatgtaact 120  
aaaacatata agtaatatat ttagatataa atatacaagt actcattcaa gtgagtgaga 180  
acaatttgtt atcccattaa gattagatct aatatgtttt atgactgtac aattatggat 240  
acaatacctc atccattgtc aatctaatta tgattatttc tctttgtatt gttcacaatt 300  
tgtatctntg cgaatgtgtt atgtccttca aaattattga tatattccct tccattgtaa 360  
ctaattctcta acaatagcac acccaattga aactctatgt ttggaaaatt atttgaaaca 420  
agaatgata attgttaaca aaaatatgat gacata 456

<210> 18551  
<211> 406

<212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18551

```

aatttadga actttctata ttcatatagt atttgccttc tttatgcca ttggcatctc 60
tttcttggc tttcttcttct tttcttcttct tttcttcttct tttcttcttct tttcttcttct
ttattatgct atgaggttct tcaactatct ctatctatca tttagagaga aaagggaagt 120
ataactacaa taacttacaa aaatattgca caacgcatac gatctatcca aactctacaa 24
acgaagaacc catatgaacc atgacaacac aatcctctac agagaatgta tgcccaact 300
actattagtg ctctacaact caagattaaa gatgtttctt ggaaaataac aacaagaagg 360
agtgtgctct ttactatcca agacattaag ccatatgggtg gtatat 406

```

<210> 18552  
 <211> 288  
 <212> DNA  
 <213> Glycine max

<400> 18552

```

gttccttcaa ctgcacaagg ctcttaatat atgaagagtt tttttgtgga atcttcactt 60
tatgaagaca ctgacaaaga ctaatcttct acttttatga caaagtatga caagctgtgg 120
agcaataaat gttcttccca tcagaccttg gatgcaactg taatcgtatc ctcatctgag 180
ctaaatctta acgaggattc aagccatcct ttgtcttgcc tcgaatgtta aagagcatcc 240
caatcacact gtcacatata tttttctgta catgcttaac atctatac 288

```

<210> 18553  
 <211> 355  
 <212> DNA  
 <213> Glycine max

<400> 18553

```

agctttgacc ttctgaattt ttatgactta ctacgccaga tgaggcaaca ctcttcagct 60
tttgccgatg gactccagcg ttggctcat taacttgcca atggccttga gacaagggtg 120
gtgtgtggga cccatcata catgcctcta gaaggacaa cttccgctga tatgttgaaa 180
gcttacaac tatatgttac aactctcct ttgcagaggt taacaaatta ttttcaaac 240

```

cagacaattg ttagtcttgt ggaaaatgag ggcagcggtc atattattga ttttggcatt 300  
 tgcctatgggt atcagtggcc atgccttacc aagaagctct cagaaaggca tgggtg 355

<210> 18554  
 <211> 482  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18554

agcttattca ctttgcactc tatagaagtg ttagattgtt gaaatccagg agcctgagac 60  
 aagtaaacag tctcattaag taagccattc agaaaaatat tattcaaacc taattgagca 120  
 ajatccact gatttgaaat ggctaaagta aaaataagtc taatagtaat tggttttact 180  
 actggagaaa aggtttatga aaaatcaaac ctttggactt gattcaatcc agtggcaact 240  
 agaggagctt tatctttatn tattgaacca ttttcgattt tttcactcta aataccact 300  
 ggccttccaa ttagatgaaa gaggtactag tttccaagta tgattcttca tcaatgttcc 360  
 acaatctagt tgcatagatg acaaccagtt tggataagtc aggcattgtc acattctttg 420  
 ttcacaacga gt 482

<210> 18555  
 <211> 303  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18555

tatgatactc agctttatna aggttcgccc taattttctt actttttcct cacctctgaa 60  
 tgagctggng aagaagaatg tggcatttac ttgtggtaaa agacaagagc aagcctttgc 120  
 tttgctcaaa gaagagttca ctaatgcacc tgttctagct ctctctgact tttctaaaac 180  
 ttttgagcta aaatgtgatg ctcttggagt gtgagctgga gctgtattgt tacaagggtg 240  
 gcacctact gcttattata gtgataaact tcatggtgcc accttcaact acaccaccta 300  
 tga 363

<210> 18556  
 <211> 443  
 <212> DNA





ccatgtggta tggttcagca tgtattgtct tagacgggtgg gaagcccaga ctaaagcaca 120  
 acacgttctt tcgagcaggg agtagttcat ttcataggcc gtgaactttt tactcaagta 180  
 gtagacagcg cgtttctctct tcccggactc gtcattgttg cccaacatac atccaatcga 240  
 ctatctgaaa tctctctctt tttggttag ggtttcttct tttctctctt cttctctctt  
 tttctctctt tttctctctt tttctctctt tttctctctt tttctctctt tttctctctt  
 acccacagaa tgggttttgc ctacacattc gaattctctc tccacattc

<210> 18559  
 <211> 435  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 18559

agcttagcca ctacagttggc aagtgtatca gctgcttctt gtgtggatgc ctacagcatac 60  
 acacgaacaa catcttcagt gccagatggt cgcacaaagc atcgaccttg ggggtcttta 120  
 gctgtaaatg cagaagagga aagagtatca agctgcaata ttagtaaaact gaaattctgc 180  
 actttaatct ttcacactaa aaggctttca tggatggatg aaactgacaa atatctcgca 240  
 gtcagtgaat ttttgccaag ccacttggac ttgataacag taatagtata atcccataaa 300  
 caagacacca acttttcaga gatataacat tcaattntgg tattatttat gcctccttgc 360  
 ctccctcact ctgcccattc ttggtgggtc acanataana gcaagcaagc aatgatataa 420  
 ccaaaaaaca atggtt 435

<210> 18560  
 <211> 280  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 18560

tattgctaaa tgcataatcaa tcagcaatc tcacagaaat catcttggtc ctgacaatgt 60  
 tagaaaccat canaccatgg ccatatataa ctgtgcaagc atgatagaaa acaaatata 120  
 aaactattag aatgaatga ggaagtntga caaaataata agacaaatac ctcttcattg 180  
 tatatacga agccttctct gactactgct ttagtatcat ctgaccgagt aatgagctnt 240

gacatacagt gtgcaggaag aagaagtgga gccatgacca

283

<210> 18561  
<211> 376  
<212> DNA  
<213> Glycine max

<214> 18562  
<400> 18561

agcttlttaag ttaaggata tgactctca catcttaata tgaatttcaa catccaaggg 60  
cactagtaat tgattaccaa aacattgtaa tgcattatag ctttttgaaa ataattggaa 120  
cgttgtaaat tcagtttgaa aactttttca aactcatttt gctactggta atcgattaca 180  
acaatatggg aatcgattac cagagagtaa aaactctttg gtaaaagggt ttgtcaaaaa 240  
ttcatgtgct attcaaagtg ttagtgcttg gctttactga gttttaaaag aatggctagc 300  
atgttggtta aacataagca cttacacaat gaaggaaagc tggagttgct gcacatgatg 360  
tctaacatta tgtcaa 376

<210> 18562  
<211> 415  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18562

agcttttatat ttgtntgttc ctaattttct tacaattgca tcacctctca atgagctggg 60  
gaagaagaat gtggcattta cctgtgggtga aaaacaagag cgagcctttg ctttgctcat 120  
agaaaagctt actaaggcac ctgtttctagc tcttctgac ttttctaaaa cttttgagct 180  
agaatgtgat gctctggag tgggagtagg agctgtattg ttacaacgtg ggcacctat 240  
tgcttattct agtgaagaac ttcattagtgc cacctcaac tatccacct atgataaaga 300  
gctttatgcc ttaataagag cctctcaaac ttgggaacat taccttgnt ccaaggaact 360  
tgtcattcat agtgatcatc aatcacttaa gtacattaga aggcaaaagca agta 415

<210> 18563  
<211> 341  
<212> DNA  
<213> Glycine max

<123> unsure at all n locations  
 <400> 18563

gattaacatt caatttcgag cgtctcgata tattacgaga ctcaatctta catcagagaa 60  
 ntaagttatt gtcgttcgaa ttctctcaga gcttcaacat tcctcttcga gcatctcdat 120  
 aagttcaaca ttaatttcg agcgttcga tatcttcaga gattcattta taaatttcga 180  
 aaaaagttat tgcgttcga atttcgacag aggaaccaaca ttaatttcg agcgttcga 240  
 tatgttacgg ngcttaatca gacatccgag aaaaaattat t 341

<110> 18564  
 <111> 445  
 <112> DNA  
 <113> Glycine max

<123> unsure at all n locations  
 <400> 18564

tatcgtaacc gattacacca atatTTTTga gacaatgatt gatttttagg agtctctgct 60  
 ntaatccatt accagtagat ataatcgatt acttctctct tannaagtgt ntcagaagtg 120  
 atcaagaaca cttaaataca ttacatcnaa aatctaactg attacatttg tctttgaagt 180  
 tttccaatnt ttgggaagaa cactntaate aatcanaatg gtaataatca attacttctt 240  
 tgaaataatn gattacattg tataatnaat tgattacagg cagttattac gagctgggat 300  
 aagctagaat aacattatta gaaaatatgt tttttacatc ggttatttat gactntcaac 360  
 atcngttttt aaaatcgatg tgaaagtacc gaccgtgata gtattattgg taacatcngt 420  
 tttttaaaac tgatgttacg taaaa 445

<110> 18565  
 <111> 399  
 <112> DNA  
 <113> Glycine max

<400> 18565

agcttaagat taatctcaaa gtgcgaaaag tacaaccttg taagagactg agtatgtcat 60  
 gcaagatga ttacatttt gaactctgct aaaagggaaa acaagttaaa aaactctttt 120  
 tccagtaaaa atattgtttt cactctcaga cctttagagt tgttacatct tgatctgttt 180

ggccaacaa gaacaacctc aatatgtggt aaaaggtatg aacttgatc agtgaatgat 240  
 tactttaaat ggacatgggt aatgttctta gccacaagg atgagtcctt caaggctatc 300  
 taaaaatttt caaaatagat taaaatgaaa atggagcatt gtggcaactt acccttcgtc 360  
 tggccttctt gttgcttctt gttgcttctt gttgcttctt gttgcttctt

<210> 18567  
 <211> 440  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18566

agctttaaga atatttgcaa catcgttntg gatatttaac aagaacatcc tatttcttga 60  
 cattggatcc ttggtaatta gattatttct cccatctctg atggaaagac tagaatcttt 120  
 catgtgaata tcatagcctt ttttgagtaa ttgtcccaaa ctccacaatat tgttcttcat 180  
 atttgggacg tagtagacat ttgatatgaa ttcattgtct gcattcttca natggattat 240  
 gatcttacct tctgtctttt atacgaatct tggaattata acagattatg cattgccact 300  
 tactgactca tcaagatcca cgatcatgct ttcttctcac acatatg 340

<210> 18567  
 <211> 440  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18567

agctttgttaa ttctgtggaag ctcttaatat ctccacact ttttggggtg ggccattctt 60  
 ggtatggcctt gatcttctca aggtccactt ggaccccatc tttacctact acaaaactta 120  
 agaaaaactat attatctaca caaaaggtag atttctctat atttgcctag aggggtgttt 180  
 tcttaaggac tgaagaact ttcttaagat gtcttaagtg atcatctang ctctactgt 240  
 atactaaaat atcatcaaaa taaacaacga cgaatctacc tatgaaatcc cttaagacat 300  
 gatgcataag cctcataaag gtgcttgggtg cattagtgag cccaaaaggc atcactagcc 360  
 attcatacaa accaaacttg gctttgaaag cgggttctca ctcatcacc ttcttctctc 420  
 tgatttgggtg ataaccactt 440

<210>	18569
<211>	438
<212>	DNA
<213>	Glycine max

agcttaataa ccttcttgt agagtatcaa gatgtctttg catggtcata tcaagacatg	60
cccggtctgg attccgacat tgtgcagcat aagttgcctt tgaatcctgn gtcttccccg	120
gtaagcaaa agttacgaag aatgagaccc aagatgtctt taaaaattaa agaagtaagg	180
aagcaatttg atgcagggtt tttagctgtg gctcggtaac cagaatgggt agccaatatt	240
gtcccagtc cgaaaaagga cggcaagggt cgaatgtgtg tagactaccg ggacttgaac	300
cgaagcagtc ctaaagacaa ttttcccta ccacacattg atatatttgt agataataca	360
gcbaaattcg tcttttctc atttatggat ggtttctcgg ggtataatca aataaagatg	420
gcacccaaag atgttagag	438

ttccgcgaat ggtatttgag gtttaatat accattatct cctttatata taaggaaaat	60
attgtttatc ggtctatata tcttcaagtc atgtcaagta aggttatatt ctatcttttt	120
ttgtttttgt tgaatttttt ttt	180
aatatttcca taatagatca taatgattgt taagctttatc tcacaaagta catatatcca	300
taaagtgtca cagaaaattca agatggacag gtgttttaaca tcgcttatcc taatgtataa	360
atgagacaca tttattctca caccaatgc	389

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323>      unsure at all n locations
<400>      18571

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ratgctgcan acacttataa tagacctect catcagcaaa actctcaaca atagaataat	60
ratgaccttt caagcaatag atacaatcca ggttggagga atcatccaaa tctgagatag	120
acaagtcttc cacaacaaca tcagcctgtc cctcctttcc aaaatgctac tggccaagc	180
aagccatatg ttctctctcc aatgcaacaa caacagtagc agtcacaaca aagacaacaa	240
gcaactg	247

<400> 18572

agcttctctc	ttttcttgta	taattattat	attttgggta	taagccttgt	atttggctat	60
gtattataga	catttgaata	cttagtattt	cttttattat	tggattagta	tgactgaaca	120
tgatgatcat	atttacttgc	tcttgggtgc	tatatgggta	gaagtcttaa	acttaattat	180
cttgatgatg	tatgaataga	ggtatgcatt	tttatttggg	tattatgaat	gaacttcttg	240
atttatatgac	attctataga	gtatttatctg	tctaagattg	atgaatgatg	aagatatctt	300

gtagattga tttctattct tgcgcattgt atttatgtat ggtaattata tttcttacct 360  
ctctaagttt gatgaatggt taacatatcg tgettaa 397

<210> 18573

<210> 18573  
<400> 18573

agcttaagct ttttcaactg cacaaggctc ttaatatctg aagagtatcc ttgtggaacc 60  
ttcacccgat gaagacactg acaaaaaactt atctttgctt ttttggacaa agtatggcag 120  
gctgggggga agtaaattct ctcccatca gaccttggat gcaactgtga tegtataccc 180  
atatcagcta gatcttgatg ggtattcaag ccctctctcg tcttgccttg aatgttaagg 240  
agcgcccaa tcaactgtc acaaacatta ttctcccat gcataacat aatacaatgt 300  
ctaactcaa gatcagcca gtacggaaga tcacagaaga tggacctctt ctcccatatg 360  
caacgtgac ttttctctt cttttgggtc ttcccaaata ctatattcag gtgttgaacc 420  
cgttgatata c 431

<210> 18574  
<211> 386  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18574

tggtntaatg tgttataaga accaatgctc ctatcaacag gcatattcca tgaccccagt 60  
ccccaaacat cagagranat aagtaaggga atataatagt tgggtaaact ataggatttg 120  
cttcttggta tcttgcaaca ctgccaaagta aaagggctaa ttangaatct aatcagttgt 180  
catggattta ttatataccg agaagaaatg gatagtaagc tagataattt gtatccaccc 240  
tgganaaaca atgcactata aagcagtcct aaaatttact tcaagacatt taataattca 300  
tgttgcctgt agtaaagtaa cttaaacctg tatgcacac caatttcttg ataaggaatt 360  
gtgaaagtgt tggctctaan atatat 386

<210> 18575  
 <211> 422  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 18575

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ttgggggggt tgcacatcag gtgtgttcac tctttgaact ttgaattac ttgttttgt 180
ggtaattttgt ttctggcttt aattntggtt tagtatttgt tgggtgtcgtt atcatcttaa 240
tattnttttaa ttctgggtatc tgaacatggc ttattgattt catcatcatg aatggctgtt 300
gtttgntgga ttgtgtcact ttccagctat tegtnttggt catattcatt tgtatgctgc 360
tctttctctc atagcttagc cgcttagctt ttgatgagtc ccttatatgt tattatttct 420
tg 422

```

<210> 18576  
 <211> 404  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 18576

```

tattacaagt cagttagaca acctcaaaga aggctgaatc taataatgaa agaagaagta 60
agataggaag tgcctcaagt ggttagaggca gggctcattt acctaatctc ggatagttca 120
tgggttagtc ttgttcaagt tgttccaan aagggaggta tgacagtgat aaagaatgat 180
agagatgagt taattctac aagaatagtt actgngtgga ggatgcgtat tgattacagg 240
aagctaaatg aagccactan ganagaccat taactgctcc ccttcattgga ccanatgctt 300
gagagacttg canggcaatc tttctactgt ttcttagatg gatactcann gctacatcaa 360
attgcagtgg atcctcanga ccaagaanaa acatctttca catg 404

```

<210> 18577  
 <211> 434  
 <212> DNA  
 <213> Glycine max  
  
 <400> 18577





ctctgagcaa attcagatga caataacttt ttactcggat gtctgattga gtcccgtaac 240  
 atatcgagac gctcgaaatt gaatgttgaa actctcagcc aatacaaacg accagtaact 300  
 tttactcgga tctctgattg agtcccgtaac atat 334

<210> 18580

<211> 368

<212> DNA

<213> locate at all 11 locations

<400> 18580

tettatccaa ggctcatctt ggtggtgaag ctctctcttt tatgaattat tccctagtgg 60  
 atggcaacct ctctcacctc ttctctcttg tcttcgctg catctccatg gtggaaaatc 120  
 accattaaag gacctcattg aagctcaaag atccagcctc catagaagcc ccacaagcaa 180  
 gcttccatca ctgcctttga ggatcgagga tagacgaaca aagracctaa gaaggaagga 240  
 ggttccattg gtcaaggtga cctgrggagg tacatcagga gaagatgccg cgtgggaatt 300  
 agagagtcag atgcaagccg cctatccatc cttgtttgag tcaggtaaatt ttcggggacg 360  
 aaattttctaa aagggttagga gagttgtaac acctgagat attataagtt atatatcgat 420  
 gtttaa 426

<210> 18581

<211> 368

<212> DNA

<213> Glycine max

<400> 18581

tatgcacttc tettatgaca acggcagcac tcttagcact aaactgctac gagcttgaag 60  
 ccatcttctc aactaaattt ctggcttcag cagggggccat gtctccaagg gctccaccac 120  
 tagcagcacc gatcatactt ctctccatgt tactgagacc ttcataaaaa tattggagaa 180  
 gaagctgctc agaaatctgg tagtgagggc aactggcaca caatatcttg aatcttacc 240  
 aatactcata catgctttct ccacaaagat gctgatgcc tgaatgact attctgatgg 300  
 cagtggtcct ggaagcaggg aaaagtcttt ctaagaatac tctcttgagg tcatccacgc 360  
 tcttgatg 368

<210> 18582  
 <211> 423  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 18582

tggatgcaa aggtgctagt aaagtgggtc acctgtctaa tataatacat aaatttggtt 180  
 aaagtgtaac atatctcttc aaataatgca agaaccacat ccaaacttct ttgatctcgc 240  
 ttcaacaat tgcaaaagaa agtggaaaat tatttctact accatcttgt ctaattggag 300  
 tcaacaaaagt accataatat ttccagtta aaaatgtccc atctgcttgc tcaattggct 360  
 tgcaatattg aaagccttca atgcatagct tanaagccca aaatacacga ttaagaatca 420  
 cct 423

<210> 18583  
 <211> 420  
 <212> DNA  
 <213> Glycine max  
  
 <400> 18583

tgtagggtta aagtctcacg attggcacgt gctgatgttc atttgtttagc cgaggctata 60  
 cgagacatct tgccaaacaa agtcagggtta gcgataactc gcctgtgctt tttcttccat 120  
 gctatatgta gcaaagtcac tgattcagtc aagtttgatg agttggaaaa tgaggccaca 180  
 attatactgt gccagttgga gatgtatttt cccctgctt tctttgacat catgattcac 240  
 ttgattatgc atctggtcag agaaatcaaa tgttgtggtc ctgtttatct acgatggatg 300  
 taacgggttg agcaatacat gaagatctta aaagggtata caaagaatct atatcgtcta 360  
 gaagcatcat ggcagaacaa gctagacatg tattttacgt gcaagacct tgtgatgaaa 420

<210> 18584  
 <211> 406  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 18584



aggaagcata tggtagtcc aacccactgg aacacaaatt ctgattatcc ctttttgtgt 300  
 tattgtcagt agcagagaaa taaagcccaa tagcatcaac totgaaacga agacagaaaa 360  
 cagaaaagga aaaaaatatt gcgaaattaa tccatccca attntcataa cagaagtccc 420  
 -

<210> DNA  
 <213> Glycine max

<400> 18587

ttgtgaagg atgtgaacga gatattgtgg gatatatatt tgggaaggcc aaacaataac 60  
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 attgattgca tgcacgggaa attgaaaaat tgtctagtty cattacaagg tcaatattgt 180  
 agaagtgatc attgcaaacc catagtaata cttgaaggcg tcccgtaaca agacttgtgg 240  
 atttgacatg cattattatg gagttgttga ttcaaattgat gacattaatg tgttaaacca 300  
 atcatttgtg tttaatgaca ttttggaagg ttgagctctc tagtgcaatt tacaattaat 360  
 gtaaccccat ataatatgag atactatatt gtagatgacg tttatcctga tttggatact 420  
 tt

<210> 18588  
 <211> 436  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18588

tcaagaaaaa gatggcctca gcaaattcct tatttccaga ttggaattct atcaatagac 60  
 ctccaattct taatggagag ggttaccact actggaaaac ccgaatgcaa atttttatcg 120  
 aggcattaga tttaaatctc tgggaaggca ttgaaatagg gccttatata cccaccacag 180  
 tagaaaagagt ttcaatagat ggtagtccat caagtgaagc cataaccata gaaaaatcta 240  
 tagatagatg gtctgaagag gatagaaaac gagtacaata caacctaaaa gccaaaaaca 300  
 taataacatc tgccttagga atggatgaat atttccagagt ttcaaatctg aagagtgcct 360  
 agdaaatgtg ggaacactct cgaataaac acgaagggaac taagatggtt aaaagatcta 420

ngataaatgc actaac

436

<210> 18589  
<211> 347  
<212> DNA  
<213> Glycine max

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ttgggttatg taatgtccct gccaccttc agagatgtat gctagccatt ttgttgatct 120  
ggtaaaaaaa tgcctcgatg tgttcattga tttttcttt gcttttggat tttcctttga 180  
ccattgttta tccaacttgg aattgggtgtg accacaagat ctggtctcga gggattgaag 240  
tggacaaggc aaaaattgat attattgaga agttgcctcc acttatgaat gtgaaaggca 300  
tccaaagtta tctcatacat gcccgacttc tctggaggtt tcataaaa 347

<210> 18590  
<211> 433  
<212> DNA  
<213> Glycine max

<400> 18590  
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taaaactgaac aaggtctctt atgggctgaa gcaagcacct tgtgcatggt ttgaaaagct 120  
ttcagcaact ctcatctctc ttgggttcaa ggctagcaag tgtgaccctt ccttatttgt 180  
atgtcatgtg gaaacacaac ttatgcgctt gtctatgtgg atgacataat ccgcactaga 240  
aataatagtg ttctaattca gcaacttatt tcatagctaa actctatttt ctctcttaaa 300  
catcttggca agttggacta cttccttggg attgaagtca actataattc cgcaggttct 360  
gtcatgcttt ctcaaaccac atacatctca gatttgcttg aaagagtaaa tatggaaaaa 420  
gctaaaggaa ttt 433

<210> 18591  
<211> 409  
<212> DNA  
<213> Glycine max

<400> 18591

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 gttacggggac tcaatcagac atccgagaaa aaagttattg tegtttgaat tagctcagaa 180  
 gttcattat cgtttgagc tctctgata tcttcaggga tctctctc tcttcaggga  
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 atcttaccat tcttcaggga atcttcaggga atcttcaggga atcttcaggga atcttcaggga  
 agattcaaca tccaatttcg agcgtctcga tatgttacgg gactccatc 409

<L10> 18592  
 <L11> 389  
 <L12> DNA  
 <L13> Glycine max

<400> 18592  
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 caacagtcac atctttttgt gtgggtcttg aatggctatc ataggcctat atatatgtga 120  
 cttgagacac gaatttgaca agagtttttc agagcaaaaa ggtcttatac tcttataaag 180  
 agaaatcgtt ttatctctctt acaaattcct tggccaaatt acttgatgatt caataaggaa 240  
 ttatttgagc gtcctaatg atcaatctat ctctttcaag agagatttct tcttttcttc 300  
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 cacacaggaa tgcgtgtcct tgtgtgttt 389

<L10> 18593  
 <L11> 367  
 <L12> DNA  
 <L13> Glycine max

<400> 18593  
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 gatctctcca agttgaagat gtccagattg caactgttgg ctacttaact cgggattctg 120  
 atgatgatcg aggaagaatg tattcatgac ttccacatga acattcttga aattgccaat 180  
 ccttcacatg tcttcaggga gaagatgaca gatgaatagc tgggtgagaaa gatctctata 240  
 tcttcagcct atagatttga catgacagtc actacactag aggatgccc cagacatttgc 300

cacatgagag tagatgaact cattgattct cttcagacct ttgagctagg actctcggat 360  
agggctg 367

<210> 18594

<211> 427

<212> DNA

<223> unsure at all n locations

<400> 18594

tcttacgtag cctctcttgg tgcacagaat atcccaataa cntatccctc ttattactag 60  
ctattgtgaa ttcttttagtt cctgaatgta caaccttaaa attggttgctt gttccctctt 120  
ttgctaaaaac atcaagagct gtaactacgt cactaatcaa aggtctggta tcagcttctt 180  
tctgaataca cattgctgca actgctatgg cttgggtgtag accctatggt gggtagttcc 240  
ctttcatcaa tggatcagcc attgatgaaa atttctctct gtctctgaat accgggttggtg 300  
ccttataaaa aaaaacatta tgaatgtcaa ttgctgaaca tttgtgcata ttattgggtct 360  
tagct 365

<210> 18595

<211> 427

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 18595

agaatcggac ctcagtgtga aaagttatga ccatcctttt ttctcgagag cgttcgttga 60  
tcaatgtcga gcctctcgac atgttatgag ctcaaacggg acatccgtgt gaagaggtat 120  
gaccatttga gtttctcgag agcttccatg gatcaatttc gagcatatgg tcttattatg 180  
tgcccgaaac tgccttctgt gtgagaagtt atgaccattt gaatttctca agagcttgag 240  
ctgtttaatt tcgagcgtct caatatattg taagcgtgaa tcggagctca gtgtgaaaag 300  
ttatgaccat tagaatttct ccaaagctta cttggttcaa ttctgagcat ctgacatat 360  
taigtgcacg aattctgtct tcgagtgaac agttatgacc atttgaattt atcgagagct 420  
taagctg 427



Q23> unsure at all n locations  
Q24> 19516

atataaatga aaggtttctg gaacaaagga aatcaaaget tataccatcg acacattgac	170
catctcaagt gcttgaaaga attaatgaca atgottacaa agttgagctg cccggtgagt	240
ataatgtttag ttccaccttc aatgtctctg atttatctct ttttgatgca gatggagaat	300
ccgatttgag gacatatcct tctcaagatg gagagaatga tgaggacatg accaagagcc	360
atggcaagga tccacttgaa ggacttggag gacctatga	399

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<223>      unsure at all n locations
<400>      13597
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<210>	18598
<211>	406
<212>	DNA
<213>	Glycine max

<223> unsure at all n locations

<400> 18598

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aaagtggcaa ttgattcaga cagatgttgt agggcctcaa agaacadctt cattgaaagg 120  
caatttgtat taactatat taattataga cttttctttt aagttcaaat caaadutgac 180  
tctttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt  
tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt  
tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt  
tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt  
tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt  
aggagaaaata aatatatctt ggagatgatg agatgcatgt tgtatg 406

<210> 18599

<211> 312

<212> DNA

<213> Glycine max

<400> 18599

ttttatttca aaagattctc atgaaacttg tgacattggg catttagctt aacacaaaag 60  
aaagccctat tctcttaatt cgagaagaag ccctaaaatt tttagattga tgcctatgga 120  
tatttgggga ccatttttta aatcatcaat tctgggacat agatatattg taactatact 180  
tgatgatgat agtacatata ctggggcggc tttattaaaa tcaaaaagtg aagtgaaaac 240  
aatgtttcaa aactttatta atctgatcga aaatcaatcc gaagcaaaaa ttaaatgcat 300  
tcgattcgat aa 312

<210> 18600

<211> 429

<212> DNA

<213> Glycine max

<400> 18600

actcagcttc taattttggg attgatgctc ttaaactggt ggtatatatt aaactgagtt 60  
ccaaccaagg ctgtctcaaa gacacctttt gagttattca agggttggaa accaagtttg 120  
cgacatatad gggatatagg argccctctt gaagtaagaa tttataatcc acaagagaag 180  
aaactagacc ctaggactat tactgggtat ttcattggat atccataaag gtttaagggg 240  
tataggttct attgtctatc ccacaacact aggattgtgg aatcaaggaa tgcataagtt 300

catgaaaatg acttgatcag tgggagtgat caatttcaga acattttctc tgaaagggat 360  
 cactatgaag ctgaaccttc tgggacaagt aatagggttg tagtcattct caccctcaa 420  
 gttaaaatg 429

<223> unsure at all n locations  
 <400> 18601

gacctataaa actcagctgt atcatacaca catctgaac gatctggtt agtttttcag 60  
 anaacattct caacagtcac atctttttgt gtggttcttg aatggctatc ataggcctat 120  
 atatatgtga cttgagacac gaatttgaca agagtttttc agagcaaaaa ggtcttatcc 180  
 tcttataaag agaaatcgtt ttatctctct acaaattcct tggccaaatt acttgtgatt 240  
 caataaggaa ttatttgagt gctcaaattg ttcaatctat ctctttcaag agagatttct 300  
 tcttttcttc ttcttcattt tgaaaaggga ttaagagacc gagggctctct tgttgtgaaa 360  
 taattctaaa cacaaaggaa gggttgtcct tgtgtgttta gaacttggaa aaggaatgta 420  
 taagatagtg gaactct 437

<210> 18602  
 <211> 427  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18602

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 cctttatcat ttcttttgga atcttggtca tgaatattca tatgttctaa agaattctga 120  
 atatcatcta gcatattctt tcttgacaag atagcattag attcatcaaa ggtaacatga 180  
 atggattcct cgatattcat agttctttta ttatatatcc tatatgcttt gcttttgaat 240  
 gaatatccaa gaaaaatacc ttcatcatat ttgcatcga attttcttag attatctcta 300  
 ctattattaa gcacaaagca ttggaacca aaaacatgta gatgagaaat attagggttt 360  
 ctaccattaa ataactcata tgggttttct tttaanataa gtctatttaa ggcctattc 420

atgatct

427

<210> 18603  
<211> 402  
<212> DNA  
<213> Glycine max

tttcacacaaa aattgaatta gtgagacatg gagttacaag atttgcctacc acctttcttaa 120  
ctttgcacaaag attgcataag caaaaggcca atcttataag gatgtttact tcagatgaat 180  
ggttgaagtc taaggcagct aaagagccca aggggaagca agcaacagat gttgctctta 240  
tgcctcatt ttggaatgat gttgtctatg ctttaaaggc tatagggcct cttgtaagtg 300  
gtttgagggtt ggtggataat gaacaaaaac ctgcaatggg tttcatttat gaagcaatgg 360  
atagggccaa agaagcaatt catagagctg tcaataacaa tg 402

<210> 18604  
<211> 417  
<212> DNA  
<213> Glycine max

<400> 18604  
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ggctcttaaaa taaaaagcga agcggattgt ttagcaactt atgaacttga aaattttgag 120  
tttttattaa gtatgactat ttggtatgac atattatttg ctgtaaactc cattagtaaa 180  
aagttacaat caaaagatat gagtatggat gccactatag aacaattaaa aggtcttatt 240  
ttattttatt ttgaaaaat atagagaagg tgaatttgaa aatactataa tttatgccat 300  
agaaattggtt aatgaaatgg agatagaacc taagtttcat gaaaaaacat gtagtittga 360  
gaaaaaaaac aatatgatag aaatattgat aatgaagttg aaaatcgccct aaagaat 417

<210> 18605  
<211> 425  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations

<400> 18605

gcacgtatcg gtcaagtgtg tggaccacgt tgtattcatt tgcctatcga taatgggtcc 60  
agtttaaaag tgatgcccaa gagcaatttg gagaaattac catccaatgc ttcccaccta 120  
aagcgaattt caatggttat tcttgccttc aaagggaccc ggcgaagagt taagggaagt 180  
gaatggttat tcttgccttc aaagggaccc ggcgaagagt taagggaagt 240  
gaatggttat tcttgccttc aaagggaccc ggcgaagagt taagggaagt 300  
ngcg tgaag tctcttct aagctc ca tttatgttga ggccgcagag 420  
gatt 425

<210>

485

DNA

150

Glycine max

<210> sure at all n locations

106

atta aaaaacacat aactaggagt ggaaatatat taaaagtctg atttatatttg 60  
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aataattcat gtaccaataaatgataact catattttgat gtgaaaaata tgttacccaa 180  
actgtcgagc ttgtaaatca acatatgata ttttaactta atcaagtga ttttaagtta 240  
atataattgt gttaaatatt ttgataaaga attttgatag ttataatagt tataatgtga 300  
tttttatata aaaataataa aaatcattag tcaatctggg taaagaaaga agacaagaca 360  
tagaggttac aagtttaaat tctocaaaac gaatatttca nacaaaactt ataataaatt 420  
aacat 425

<210> 18607

<211> 385

<212> DNA

<213> Glycine max

<400> 18607

acatgaaat tgaggaacca aaccaaattt atatgggaga ggcgtgagag ctacggaagt 60  
ttctctgcta cacttgaga tggaaattca attgcagcat ccgaagaagc acttgagagc 120

gagcacaatca caaggaggcc aagggagaag caacaaccac atgtcccaaa gcaagtatgt 180

tggggtgagg caaagagcat cagggaatg ggttgctgag atcaaagaca caacacaaaa 240

gataagaatg tggcttggca catatgagac agcagaggaa ccacaaaggc cttatgatga 300

ggttgctgag atgttgctgag atgttgctgag atgttgctgag atgttgctgag atgttgctgag

ggttgctgag atgttgctgag atgttgctgag atgttgctgag atgttgctgag atgttgctgag

<210> 18608

<211> 353

<212> DNA

<213> Glycine max

<400> 18608

aattgaggaa cccaacaaaa tctatatgtg tgagttgcga gaactaaggg aggtttctctg 60

ccacactttg agatggaaat tcaattcccg cattcaaaga aacacttggg agccagcaca 120

tcaaaaggaa ggttaagggag aaacaacaac caccacaaac aaagccagta tgttgggggtg 180

aggcaaaaaa catcagggaa atggggttgc gagatcaaag acacaacaca aaagataaga 240

atgtggcttg gcacatatga gacagcagag gaagcagcca gggcttatga tgaaactgca 300

tgcctccttc gtggatccaa cactcgcacc aacttcacaa cacgtgtgtc cct 353

<210> 18609

<211> 426

<212> DNA

<213> Glycine max

<400> 18609

aggaatttgg acaaagacgc tagtatcacc gttcttttgt caaggttagc ttatgaactt 60

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caattccccc gtgggtgata atgaaaccca agaattttct gcctctaacc ccaaagggtc 180

atttttcaag attgagggc atgttatact tgagaatctc ttggaacacc ttgccaat 240

ttgccaatg ttgccaatg ctatgagact tgaagacat gtcattcaca tagacctga 300

cattctgtca tatctgttgt ttgaagaccc agtcacataag cctttgttat atggtctcta 360

cattctggaa gtccggggcca ccacccataa gcttttcgat gatgggaaag gcatatgcat 420

catttgg 426

<210> 18610  
 <211> 415  
 <212> DNA  
 <213> Glycine max

<400> 18610

aagaggttca aaggtacggc cggagcattg aaattatcgg tgaaggccctg ccactatagg 120  
 cacttccctca catggatgca acaatagttt tccatagtga gccagtaata cccatcccctc 180  
 acaatctttct agggcatggc atgcccgttg gcattgtgtc caaaggatcc ctcatgcaact 240  
 tctactagca ttgtcttagc ctcttggca ttacacatt gaagcaaaac catatcatgg 300  
 ttcattttgt acaagatatt tccacttagg aaaaagcagg ctgcacaaac attactcagc 360  
 ttacgaagaa caatttctta taatattcaa ccaatttaga atcaagaact caaca 415

<210> 18611  
 <211> 273  
 <212> DNA  
 <213> Glycine max

<400> 18611

taacttgctt attgctgtga cttacagtct tcaccgggct cacttatgt gtctactga 60  
 ctgtgaagtc accctcactg gctgacagac ccgcagggtc agccatacag agatttgacg 120  
 aacgccacca tgcttgctct acaatctcgc taagacgac catctatgat ggccggtctg 180  
 ttcactgcga ctgactattc cgccatgacg ctgagatttt atctctgtac agctctctct 240  
 ggaactgcc aagtgcctc tgagaccac tga 273

<210> 18612  
 <211> 355  
 <212> DNA  
 <213> Glycine max

<400> 18612

cttgattttc tcacggtgca ctgagaccac atctctacca actacaaacc ctatuaaaac 60  
 tatattatct acacaaaaag tacccttctc tataattaca tagcgggtgt atttccaaac 120

gactaaaata atttgccctga gatgtcctaa gtgatcatct atgtcccaac tgtacactaa 180  
aatatcatca aaataaacia ctacgaatct acctacgaaa tcccttaaga catgatgcat 240  
aagcctcata taggtgctta gtgcattagt gagcacaaaa ggcattacta gccattcata 300  
caaaccaaac tttttttttt tttttttttt tttttttttt tttttttttt 360

<210> 18613  
<211> 363  
<212> DNA  
<213> Glycine max

<400> 18613  
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acgaatgtgc tatgagggga cgtgactcgt ctatacgtc gaaattgagc gacggatgct 120  
ctctagaggt gegaatggtc ataggtatca acacggatgt ccgatacgtg gacgtagtag 180  
atcgggagcg tcgaaatgga acagcggaag ctctggagac tatgggaatgg taataacatt 240  
ccactatgat gttcgacttg ggaacgtaat atatctag 278

<210> 18614  
<211> 363  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18614

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ctcaccacca tatgaagcca tggataagag cttgaaagta ggagaagatg agtggaggga 120  
gagggagaga agagggcacg aaatttatgc ctcaaattag gtcaaaacat taaagtctaa 180  
tttcttaaat gatcaaaactt gaaaaaatgc acacacaagg cctctattta tagcctaagt 240  
gtcacacaaa attggaygca aatttgaatt tctattcaaa tttcacttga attagaattt 300  
gaatttgtgg atccaaattt ggagccaaaa ttntactaac tatgagtaat gaatttcagc 360  
tat 363

<210> 18615  
<211> 317  
<212> DNA  
<213> Glycine max



<400> 18615

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atatttagctt gtcttcacgt acncccacgt agcccatatc ctccacttgct tcaacacccg 120  
gctctctctt cctctctctt cctctctctt cctctctctt cctctctctt cctctctctt  
cctctctctt cctctctctt cctctctctt cctctctctt cctctctctt cctctctctt  
tctctctctt cctctctctt cctctctctt cctctctctt cctctctctt cctctctctt  
tctctctctt aatctca 317

<210> 18616

<211> 314

<212> DNA

<213> Glycine max

<400> 18616

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tatagctgag gcttctctcg cacttccct tgaagaactt gtgaggaaaa tgactatgca 180  
atcatgagcag cttcaacaag agaccaaagc ctccattcat agcttaacta atcaaatggg 240  
araattgctt acacagttta atcaacaaca ttcttacaat cctgactgac taccttctcc 300  
atctgtccag aatc 314

<210> 13617

<211> 310

<212> DNA

<213> Glycine max

<400> 13617

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agcagacctt atttctctcc accaatccaa cagcaacaac aacaacagca ataucacct 180  
aaacaacaga tagthaggc cactatgcaa ccttccattg aagaacttgc gaggcgaatg 240  
atcatgagga atatgtagct tcaactagag accagagcct ccataatatag cttaactaat 300  
tagatgggac 310

<210> 18618  
 <211> 360  
 <212> DNA  
 <213> Glycine max

aggtttttaa atgtttta ggtttttt ggtttttt ggtttttt  
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 cctaattgctc atgagaacct tacggccttc ccttggatct ctggcccaat atactcggag 240  
 tctttctatcc aattccctaa cgaggttaga ttacatcact atgcatgcat caactttgaa 300  
 taacacccac acggaaatgc tcttgcgtta ctcaaatttc tcaatttcag acacgttgat 360

<210> 18619  
 <211> 302  
 <212> DNA  
 <213> Glycine max

<400> 18619  
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 caaagttgag ctgcccgggtg agtataatgt tagctccacc ttcaatgtct ctgatttata 120  
 tcttttttgat gcaaatggag aatccgattg atgacaaatc cttctcaaga gggagagaat 180  
 gatgaggaca tgaccaagag caatggcaag gatccacttg aatgacttgg aggacctatt 240  
 gatgatgaca tgaccaagag caagggcaag gatccacttg aaggacttgg aggacctatg 300  
 ac 302

<210> 18620  
 <211> 383  
 <212> DNA  
 <213> Glycine max

<400> 18620  
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 tgtttgagaaa gaaaatcggg gtgtgttacc aaggagacat cctttacaca ctgcattggt 120  
 ctcttttatg ctgtgaagat ctctcactat gtctctctca tgaadaaact tcaagggcag 180

tgtgttgaag tggcdaaato ttgatgcca tagccatgaa tcatcaactt gtaccttcat 240  
 gccaatgggt ggtgcataat taaatttaga gggaagcttc tatgtctctt attcatcttt 300  
 acctgggcta tctcagacct ttctatttgt tgcctaagat ttgcatacac ctcttttaaa 360  
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<212> 18621  
 <212> DNA  
 <213> Glycine max  
 <400> 18621

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 gcactgatac ccttaactag tcaatatggt cttgagcagg ttgaagacat ctatactata 120  
 agaaa ccttaaaaaa actat gcatatggaa gatgaggcgg 180  
 .cattgtat caatgttata 240  
 natgtggaga caaatgt t tca 293

<213>  
 <213>  
 <223> unsure at all n lo  
 <400> 18622

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 agattattag tagcaacca catgacatct ttttcagctt ctatggcccc aaatggcccc 120  
 tcttcgggcy taacctcact tcaagaatcc ttcacccctc acaagttaag tcttatccac 180  
 atgctcctgc aacgccttag atggttatct ggttgcctact tatgcctctg tgaattctct 240  
 ggtagctgag atcgggaggg acccaacagc ttgggatgat cctttgggct ttaagcaga 300  
 gagggttcctg aacaatggtg aacaaaaatg aggcacaaat tttgacataa tgggaagtaa 360  
 agagatcaag atgatgcctt ttggggcagc gaggagaatg tgccttggtt atgcttttng 420  
 aaatttgcac tttagag 436

<210> 18623





agtacaaaag atgcattttt caagattggc atacaatcgt tctttttctaa gcacagtcaa 300  
 gacagatttt aaatgatcaa ttgcaaatc aagcgaagtg ctatagataa gactatcctc 360  
 aaagtacacc acaacatact ttccatgaa c 391

<210> 18628

<400> 18628

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 gtttcatgcc aacacctgtg ttctttttca acaaattttt tgattttaatt tacaataatc 120  
 ttgttagtgg cttctgcttg ttgttagct taggcataga aaggcataaa ataaatgatt 180  
 tcatgccaaa ctattgagcg aatgccacta cctgttcaca tgtgaaaata gtacctgggt 240  
 catccattat agcctctgggt atcccaaatc tataggctat ttgggtttgg atgaatttga 300  
 tgatgtcatt ttgagtaaca gagaccatca gttgtgctc caccacttc gtgaagtaat 360  
 gtgttgccac aataatataa ctatggcatt tagaagaact aggggtggatt tt 412

<210> 18629

<211> 399

<212> DNA

<213> Glycine max

<400> 18629

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 atacattcaa gttaaagggtc aagccaggga agacatacct tatgcgtttg atcaatgctg 120  
 cactcaatga cgaactcttc tttagcattg caaatcacac cctcacagcg gttgatgtcg 180  
 atgcaattta ttctaagcca tgtgacaactg acactattct cattgcccct ggacaaacct 240  
 gcaatgttct tctcaaaaac aaatctcact atcctaattg cacatcttct atgagtgcct 300  
 taccatattg gactggacaa ggtacttttg acaactcaac tgtggatgtt atccttgaat 360  
 atgaagtctc accacattgt gttcactcaa caacttcag 399

<210> 18630

<211> 427

<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18630

ggttaaaagaa aaataaaaaa agtaaccaga tattgacccc atadgttatt caatgaagaa 60  
tctatattat agtaccaatg cctccaattg ctttcacaac agcttcactg ccccaagtac 240  
ttaatctaca gtatacaagt tgtcctttca ccttttttgg ctctaaggag tcttcatagc 300  
ataatctgtc aatgcattga aatggtactt tgtaaatatg gaaagcttaa ctagggtgtg 360  
tcaataaaac aaaaagaaaa ttacttagca ttttccttgc ttccaaattg tataatcatt 420  
ccttacc 427

<210> 18631  
<211> 439  
<212> DNA  
<213> Glycine max

<400> 18631  
ctcgtacccg ggatactcta actcacctgc cgcaagcttt cttttactta ttgtgaagga 60  
attgagtacc ttgagacctt ctctcctgat gagaaaattg agacaattcc agctattctt 120  
gcttaagact gcatcaattg ctggaaactt cagctacttg atgttaacaa tgcattcctt 180  
catggaatcg catctgagga agtetacatg gtccctcccg ctggcgtcaa tgagtcacat 240  
ccatctcaat gttgcaaact ccttaagtct ttgtatggcc tcatacaagc caatcgagca 300  
tgggatgaaa aatatccctt tttctctttg tcttgtggat atcatccagc tcatgccgat 360  
catagcctgt tcatcaaaac taatcagtcg aactctatag actttatata tttattgttg 420  
gggcatattg gctaactag 439

<210> 18632  
<211> 420  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18632

gganchangg cagggatntc accagaaant aatgtttggt ttttacacnc naaagacagc 60  
 cngccgcact caccacggnc actacgagca cggggggang ccatncgggc tctgcaacgc 120  
 accgtcaatg tttcaagctg ccatgaacaa cttctcagc ctttccctgc ggaagtctgc 180  
 accgtcctca acaaatattc aggeta cy aaatgntc agcctcgat ctteca ca 420

<210> 18633  
 <211> 3  
 <212> DNA  
 <213> Glycine max

<214>

gtaga caagtggcct tagaaatctt aagaagtgtt ggggtgggttg aattaaagatt 60  
 ntacaaacca ccccaa aaaaattcta ctttgatctt aatgcaagtt ccaagttccc 120  
 ctcaa attaaacaat ctgaatgtaa atgttaagaa 180  
 caaata aaggagttta agygaagaga aagtgcacac acagttttta tgctgggttcg 240  
 gcaaagtctg ttgctactgt ctagtcccca agaaacccac ttggggagttc cactatctcg 300  
 canatccttt acactttctg aaacacacaa ggaaaaccct ttctttgtgt tcagatactt 360  
 tataacaaga gactttcagt ctcttagccc ttgattaga aagagaagaa gaagaagaag 420  
 atg 483

<210> 18634  
 <211> 433  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18634

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 tttctctctt tttaaaagaa caagaaaaat acagaggyaag ggaatccctg gaggaaccca 120  
 ggaagaacaa aaaactcaga attgaaagaa catgcaatgg tctcttgat tttcccatat 180



ttcaagcgta atategttta actacatcgg agttcaacggg cgaggggcaat tcttcgcat 240

ccatgtgggt gagtatcaaa gcaccccccag aaaaggtctt tttcaccatg aaaggtcctt 300

cataatttgg ggcccacttg cctcgtttat ctttaacagc gtgggacatc ttcttcaaca 360

ttctcgtttt ttttcaatct ttttcaatct ttttcaatct ttttcaatct ttttcaatct

18635

<210> 18635

<211> 233

<212> DNA

<213> Glycine max

<400> 18635

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aaaaatggaat tcatcactga agacgctaac ttttgataca gggtcattgc cttacgccta 120

aaaaatgtag ggcctacata ccagagattg atggaccaga ttttcaaaac atagatggta 180

caataagttg aggtctacat tgacgacatg gtgggtcaaat cccatagcat acc 233

<210> 18636

<211> 402

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 18636

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gtaaaaagtt attatcgttt gattaggcta agagcttggtg ttttgaattt cgagcgtctt 120

gatatattac aggaactcaat cagaaatccg atttaaatgg tattcattcg gacatccgag 180

taaaaagtta ttgtcctttg aatttgetac gagcttccgg tttcaattac ctgcattcgc 240

atatactatg agacacaatc ggacattcga gtaaaaagat atcctcgttt gaatttgcgc 300

agagccttcg ttgtcaattt cgagcgtctc gatatattac gggattcatt cagacatccg 360

agtagaaaagt tattgtcatt tgagtttgcg catagcttct at 402

<210> 18637

<211> 413

<212> DNA

<213> Glycine max

<400> 18637

agcttcacac attacacac ctccttttgc aacagattgg atagtggag ggccactttg 60

ctaaatccg tctataaagg cctataaag cctacatgac caaaaaaa aaaaaactct 120

agaattacca aacatgtatc aaaagaggat tctataaag taaaatcctc cttatccacc 240

tgtatgcaac tctctaaaaa atcattgaaa atgctaagca tacaccgctg gaaggtagca 360

ggggcgctgc attggccaaa gggcaccctc ctatagaca aagtgcctaa ggg 413

<210> 18638

<211> 424

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 18638

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gatatgcatg tatataacaa acataacctca caaaatatat atatgtatgt ttaggttagca 120

agataccttg gatatgcatg tatatagcaa aaatatctca caaaacatat atatgtatgt 180

ttaggttagca agataccttg gatatgcatg tatatagcaa aaatatctca caacatatat 240

atatgtatgt ttaggttagca agataccttg gacacacatg tatatagcaa aatacctcac 300

aaaaatatac atatgttttag gtagcaaaat acctcatgga aaaagaaaaa gagataaaaa 360

agaaaaaaaa ataataataa gttgtctagc taaaaaaaca acatgcttgt gaaaagagat 420

aact 424

<210> 18639

<211> 393

<212> DNA

<213> Glycine max

<400> 18639

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gtacattgtct tccatttaac atgctcagtg taagtaacaa agtaccgag accatccctg 120

agaaagtctt taaagactct acgagccaaa caacgaatcc cgagtttctg aatgttctgc 180  
 atgttgctgc acaacaccac ctgtgcccc ttggctcttc cctgcaccc ctcccatgac 240  
 caccgtatcg gccgtgtgca cctccaccac caccaccgaa gccatcgctt ccaccaccac 300  
 cgtgtgtgtg cgtgtgtgtg cgtgtgtgtg cgtgtgtgtg cgtgtgtgtg 360  
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<210> 18640  
 <211> 420  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18640

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 ttacctnggt aaactttatc agagagaaat cagaaacctt tgaagtatcc aaagagttga 180  
 gtctaagact tcaagagag aaagactgtg tcatcaagag aatcaggagt gaccatggca 240  
 gagaatttga aaacagcagg ttactgaat tctgcacatc tgaaggcatc actcatgagt 300  
 tctctgcagc cattacacca caacagaatg ggatagttga gaggaaaaac aggaccttgc 360  
 aagaggtctg tggggtcatg cttcatgcca aagaacttcc ctataatctc tggggtgaag 420

<210> 18641  
 <211> 414  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18641

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 tcatattctc aatcaattcc atggtctctt caggggtctt caatttatt ttcccccctg 180  
 tgaagcatc taaaagttgc taggtatgtg gccttaaccc gtcaatgaaa atatggagct 240  
 caatggctt tgaataccca tgagtagggg tcttctctag taaccacga aatctttcca 300  
 aaggttact caaggactcg tctagaaatt gaggaaagga tgaatgaca gctcttctt 360

cagcagtctt ggactctggg aagtatnctt tcaagaaatt ttcaaccact tcat 414

<210> 18642  
<211> 436  
<212> DNA  
<213> Glycine max

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gcaaaccaaa tgcaccttct ctaactcctt gatcataaag atctacttca gaagtgcctc 120  
cttttggatc acatgataa acttctcttg ccattccaatc cgtatcaaac agaaagaagg 180  
gaaaccatga caactgcagg tagacaggat tgaatgaac ataagaagga tttcaaatgg 240  
gaagcaccaa cactaggcta atagcattca caacacaacc gacttgaaaa caqaaatctc 300  
aacagaaaac ttgcaaata aatactagta cataaccaag tgagagccat tacaaccagg 360  
acagaatgca tagcaggtgg caaatgcctt aaacttgtca acaagtttac caatactgct 420  
ccaggcccat 480

<210> 18643  
<211> 396  
<212> DNA  
<213> Glycine max

<400> 18643  
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gacctccaat cttaaatgga gagggttacc actactggaa aacctgaatg aaaattttta 120  
ttgaggcaat agacttaaat atttgggaag ccatagaat agggccttat ataccacca 180  
cagtagaaaag aatcacaata gatgggagca caacaagtga aagcataaca atagaaaaac 240  
ctagagatag atggtctgaa gaggatggaa gacgagtaca atacaattta aaagccaaaa 300  
acataattac atctccctgt ggaacggatg aatatttcag ggtttcaaat tgytaagagt 360  
ctaaggaaat gtgggacact ctacaattta cacatg 396

<210> 18644  
<211> 355  
<212> DNA

<213> Glycine max

<400> 18644

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gaactataga tcaatatttg cctcaaaactg tttagaattg gaaagcagct tctcaattaa 120  
ctggttggtga aggcaactgg tgcataattt tttaaactc tcccaataa cataraggt 180  
ttctccactg agttgcctaa tgcctaaaat atcctttctg atggccgcyg tecta 355

<210> 18645

<211> 403

<212> DNA

<213> Glycine max

<400> 18645

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ccaaaatgga cggccttggg gcaacctca caatctcgcc gccttttaggt tctttaactc 120  
gagcctcggc ttraatgatt agttctgaat ttgagcttgc tccacattta attataaatg 180  
gtgaggtatt acccgtattg aattgaagga cgttccactg tgccacatca gttccagatc 240  
cagagcctgt atccgttgat ggcttgcgag aatgtgatag attctgaatg cggtcacttt 300  
cttcaggaat tgactgcac ataaaagagg gattaggaat cccaaaactc aattaaggtc 360  
acgctcagac acagattcag atgccagaaa tgctgagaca gga 403

<210> 18646

<211> 395

<212> DNA

<213> Glycine max

<213> unsure at all n locations

<400> 18646

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gttaaaqaaa aatttgagta aaggaaattt ttacataaaa taattctaaa ttattgatcc 180  
tttgttgcat ttgacaaact tctataggcc tgacattgca taatgagttg gttagattaga 240

aaggtatact aataattctg atcattctca ttggattaca ttagaaagag tttttagata 300  
 cttaaaagga atcattaatt atggcattca ttatacatgt tttctgcag taattgaagg 360  
 gtttaacgat gcanattgga tttctaatto tgarg 395

<210> 18647  
 <211> 396  
 <212> DNA  
 <213> Glycine max

<400> 18647  
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 gaaaaagtgt ttgcagaaga tggtyacctt aggagatatt atgagaacaa tcacaaggaa 180  
 ggagattttt attgttttgg ttgtgggggt attggaaga aggtatggaa gaggtttaag 240  
 gattgtattg gactaattca gcactccact gccatattaa ggacaagaag gaagcgagct 300  
 cacagagcct atgcacaagt catctgcaaa gttgtagggt gggatatcga tcaaattgcca 360  
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<210> 18648  
 <211> 396  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 18648

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 tatgtgcatt gactacacca acctcaacaa agtgtgcacc aaggacacat atgctttgcc 180  
 cagcatcgac aggtactctg actacgtgcc tgtgttccaa gtactgagtt ttcttgatgt 240  
 ctatttagga tacaaccaaa ttagaatgca cactccagac aagagaacac aacattctta 300  
 atgaagatg ataatttttg ctgtagggtc atgctctttg gcttgatctt canacaacag 360  
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<210> 18649



<400> 18651

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tcacaagttc tccaagggaa ggttgogaag gagctcaac tgtttgctgt ttctgggggt 120  
gttgctcttg ttttctcttg atttctcttg caatctcttg tcttctcttg tcaatctctg 180  
gtctctcttg ttttctcttg atttctcttg caatctcttg tcttctcttg tcaatctctg 240  
gtctctcttg gatgtttgca gcataagctt caagctgttc aattgcttca gattgttgca 300  
cagaagggca aaggtctgtg tgggtggtctg c 391

<210> 18652

<211> 449

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 18652

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tttactcaag ttatgaattc ccaatgacaa tcttctttaa tattaattca aatgaaacaa 180  
tttgaatatg aatataaagc aataataaat aaaggagatt aagggaagag aaaatgcaaa 240  
ctcagtttta tactgattcg gccacacct tgtgcttacg tccagtcctc aagcaacctg 300  
cttgagagtt ccactatctt gtaaattcct tttaacaatt ctaaacacac aaggacaatc 360  
cttctcttgt gtttagagat cctttacaac aagagactca cagtctctta atcccttana 420  
gaatgagaag aagaagaaga acaaatctc 449

<210> 18653

<211> 424

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 18653

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gtatadctat aaatadgaac atgtgttaac ctgtctctaa cttaaa'gaa tgaagaacac 120



gtgagacaca cttcaaagtt caacttctct cctaattctt cttcaattcc cctccccctc 180  
 tctctctctc attctcttcc tccattgaag cttcttttct aagcttttta tccaaggcat 240  
 tctcttggtg grgaatgatg caatcttacc cccccaaggg cattgtatag aggactccaa 300  
 gaagattgaa ctacacatag aadadaaggg caaagcttc tcttgaagct tcttctttaa 360  
 tcttctttaa tcttctttaa tcttctttaa tcttctttaa tcttctttaa tcttctttaa

18654

<110> 18654  
 <111> 302  
 <112> DNA  
 <113> Glycine max

<123> unsure at all n locations  
 <400> 18654

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 accattaaag gacctcattg aagctcaaag atccaacctc catagaagcc ccacaagcaa 180  
 acttccatca tattctctca cccgggattg tatctattgc tggagaggtc ataattgttc 240  
 tgggtgggtgga ttttgcctgc gagtttgagg aggtctattg tagatgtttg cagcataagc 300  
 tt 302

<210> 18655  
 <211> 405  
 <212> DNA  
 <213> Glycine max

<400> 18655

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 aatctgcato tgnatctatt actgttgcaa gactctgtgg tctatgttct tttgttgatc 120  
 accatacaga tctctgtctt tctttgagc aatttggagt caatgagcaa cctgaagcct 180  
 atgttgcaaa cattataat agatccctc agcagcaaaa ccaacaatag tagaataatt 240  
 atgactcttc aagcaacaga tacaatttat gttagaggaa tcatccaaat ctgagatggg 300  
 caatctctcc acagcaaaa cagctgtgct ctcccttcta gaatactat ggtccaagca 360  
 ggcctatagt tctctctca atgcagcagc aacaacaaag acaac 405

<110> 18656  
 <111> 459  
 <112> DNA  
 <113> Glycine max

gatcttttct atctaatatg catctctgca aatcagaata tgaaaaaact gtcattgtta 120  
 aggaagtacc tttaggatac cacataagca aacacttacc atgatatcca atctacttgc 180  
 aatthaagcaa agaagtgatt caatcatacc ttgtatctt gaatgatgca ctaatttacc 240  
 tttctcatca aaggcaaggt atgttgatgt agacatanga gcataatgctt ctttgcattt 300  
 ctctatacca aattttctta tgggttttat gcaatatctg gtttgactga agaaagttaa 360  
 atgtttcaat cgtttgactc tgagtcctat aaagaaatct aattctccca tcatagactt 420  
 ctcaaagtct tttagcatac aacatgacca ttctttgca 459

<210> 18657  
 <211> 409  
 <212> DNA  
 <213> Glycine max

<400> 18657  
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 agtacgcttc ttggaattgg gatgaagaaa aagtggagaa gaacgttctt ataccgctc 180  
 aactacctca agaagaagct gaggaagaag acccaggtga accaccttca cctccaccac 240  
 aacaacaaga tcaagaacta tcatcaccag agtctactcc aagaagaggt atcttctctt 300  
 ggtggacata tatgaaacct gtaacttggc cataacttgaa cttggaagct ttgaggaagc 360  
 gtcaaagtag gaagtatggg tcaaggcaat ggaagaagag atacaaatg 409

<210> 18658  
 <211> 341  
 <212> DNA  
 <213> Glycine max

[illegible]

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.0250      unsure at all n locations
.4000      18659

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aaaaaagtc	ttattacaaa	gacaactcag	aatgccccga	aatacaaggc	taaaacccta	180
tactactaga	atggcctaaa	tacacggcct	agacgaagga	naaacctatt	ctaataattt	240
caaagataag	cgggctcata	cttagcccat	gggctcgaaa	totaccctaa	ggctcatgag	300
aaccctaggg	cctttccttg	gatctctagc	ccaatctact	tggagttctt	tagccaatgc	360
ccttgccggg	taggattgca	tcacgagttg	cttcaaggat	tctcttggtc	ttgtcttttg	420
atgctctgtc	caagtctatg					440

```

#223>      unsure at all n locations
#400>      18660

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tgaggatggg	gtgaggaga	tgaggatca	atatacggat	aaagttaagc	ttcttttta	60
ttataagngc	atggcatat	tatgtgca	acaaatag	tcacacacg	gtattgaac	120
gtctgtaat	ctctggaag	gatgggtac	acgtgacat	cccttcaat	ggtttaactga	180

tgaaatggat tcattcaact ctacttaatt taaaataaat aaatagaact cattgataaa 240  
cattgttata taataatatt ntatcaacta aagaagataa tcaattctca tcataatcat 300  
tcttatcaaa aataatataa tctcttgaat taattatcac aatacgaatag attttgaaaa 360

<210> 18661  
<211> 462  
<212> DNA  
<213> Glycine max

<400> 18661  
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tattgttatt attgttttct cggtcattga ggtgccactt gagctgccaa gtctctccac 120  
ctttggggct attcttttga aagattcgtg cccccctttt gcacatgttc tgtagtgcga 180  
tcttatctga agacattata ctgacactgc ctaacgaagg caaccactag gtcttccaa 240  
gaatggactc gggaagggtc caagtttagt taccaggtaa cagctacccc agtaagactt 300  
tcttgggaagg aatgtataag caattctctc tcttttgcgt atgcttccat cttctgataa 360  
tacatcttta gatggttctt ggggcaagta gtccacttgt acttgtcaaa gtccagcacc 420  
tgaatttgg gaggggtgat gatattgggt actacgaaca ac 462

<210> 18662  
<211> 399  
<212> DNA  
<213> Glycine max

<400> 18662  
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atatattacg ggactcagtc agacaaccga gtgaaaagt tttgtcgttt gaatttgcct 180  
agagcttggg tatcaatttt ccagcgtctc gacatattac ggtactcaat cagacatctg 240  
ajtaaaaaact taatgcgttt ttatgttttt tagagcttcg gtaatttaatt ttagagctct 300  
cgaatatatta taggactcca tcagacattt gagtaaaaaa gtaattgcctc ttgaatttgg 360

ctcagagctt caacattaaa ttctgagtgt tccgatata

399

<210> 18663  
<211> 440  
<212> DNA  
<213> Glycine max

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taactctgatg tctgattcag tcccgtaata tctcgaaacg ctgatattg aatgttgaag 180  
ctctgagcaa ctccaaacta cagtaacttt ttactcggat gtctgattca gtcccgtaat 240  
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tttactcgga tctctgattg agtcccgtaa tatctcgaga cgtctgaact ggaataccga- 360  
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atatatcgaa acgctcgata 440

<210> 18664  
<211> 405  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18664

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ccaacaccca gtccccgatg ttaaaactct gaggtcgtct ttgtgcgtct gctgtctact 180  
tcattctctg ctgtgcctg agcagtttcc gactgagcag ctccaaaacc tctgcgcgtt 240  
agttgagcac ctcatccacc gtgttgatag acgatgtccc ccccaaatat tccggaatag 300  
caggttggtt cggacgtag atgatcttga acgngtgat ccttgtgcct gagtggcatg 360  
aagagttyta tgaccactca acccataaca ggaattgcac ccacg 405

<210> 18665  
<211> 410

<212> DNA  
<213> Glycine max

<400> 18665

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ccttttcaagg gtatggtttt cttggttttt cttggttttt cttggttttt  
ccttttcaagg gtatggtttt cttggttttt cttggttttt cttggttttt  
ccttttcaagg gtatggtttt cttggttttt cttggttttt cttggttttt 120  
attaaatatg agaattctcat ttttctatat 300  
gcatctgtgg agtcttattt ctaaaacggg ggaatthaatt cacataaatt tcaagagagt 360  
tggccttttt cttggttttt cttggttttt cttggttttt cttggttttt 400

18666  
403  
<212> DNA  
<213> Glycine max

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tgtgggttttc caatctagct tacattctgc aaagttagaa tatgaaaatc caattaaact 120  
caaggaggta cctttggggg accttaaacc aacattgggt gtgcccttaa ggtacttaat 180  
aatccttttg acaacattta aatggtatcc cttggggattt tttttatata tttcacatat 240  
gcacacactt agcatgatgt caagttgggt tgtagtcaaa tataggagat aaccaatcat 300  
aacctatatac ttgactcat ctaccgattt accttttttc tccaagtcaa gataaatgga 360  
tgttgccatt ggtattggtt cttccttaca ctnttccata ttg 403

<210> 18667  
<211> 438  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18667

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aacgattttc aattctatca aattagttca atagaaatat attaatattt aagtctaata 120



ttttctccct tttcaaacttt ggactcacta atgtactctc cgtctctaag aatcatggat 300  
 ttcttgatag ggcactcata tgcataatgt cccaagccgt ggcacggaaa gcaattgaca 360  
 tcccgaacant ttttntagga ttgttcttgg acatttggag gagtnttga tggatatagt 420  
 gttttttt tttttttt tttttttt

<211> 368  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18670

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 acggcacact gctggagaaa tgcctataag agatcacggg ccaattttta ttgaggtgca 120  
 atcaactccc ttcattgcgt agacgatcat tgcctgatgc cacatcattt taatgttcac 180  
 cgagctgatg ctaattggcta tataaccttc aggcctctac tcatgcagtc ggacatcact 240  
 ctacatctga tgagtaaact aagtaccggg gaactgatga gatcgaatat tggaatatgg 300  
 caaggaatcc agtgaatacg gccaaaagac gggtagaaag gaatgggttc gggagtgaca 360  
 aggatgaa 368

<210> 18671  
 <211> 393  
 <212> DNA  
 <213> Glycine max

<400> 18671

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 aaggaaactta ccgtacgttt gagcaatcct ataatttctt gatcttgcca aagccttatg 120  
 tcaacaatat tagcaagcaa atcaacctgc atcaaaatgt gggattgttc attgggatgc 180  
 tgaattggct tctctttaat ttcttcttcc tttaacgattg agaggataat aatcttagac 240  
 attacacaat aataatatat agatcaattt aaataagcat catatctatt tcaacttct 300  
 taatattaca cctataaagt cacatcaagc tcttcattac cttgtcttga cttttcattg 360  
 aacttttctt ctaatatata caacgacac tct 393



<210> 18672  
 <211> 451  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations

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 tgcacaata gaaaaaccta gagncaaatt gactgaggaa gaaagaagat tagtacaata 240  
 taatttaaag gccaaaaata ttattacata tgccttaggt atagatgaat accttatggt 300  
 ttcaaattgt aaaagtgcta aggatattgt ggatacacta caagtaacac atgaaggcac 360  
 aacagatgtt aaagatcta ggataaacac tntaagggtt gagtatgaac tntntangat 420  
 gaatgtaaat gaaagtatac aagacatgca a 451

<210> 18673  
 <211> 396  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18673

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 atccattcaa tatataatca cttcttgatt aggggtttct ttctaaatga aggttacacg 120  
 gtaaaggaaa agtattgaat tataactccc gaaaaaataa taatacaata cttctgacct 180  
 ttaattttta cacattcata attattagat ttttagaaca gttatttcaa aagtcaataa 240  
 tcatttatcc ttctggata ttttagattaa aaagaaaagg tattataaag attntacaca 300  
 atcattaatc actatatgat aatttcaaag acttttataa tatttatctt anaataagtt 360  
 aaaggatgat ttgtgattag atgataatat aatcag 396

<210> 18674  
 <211> 426  
 <212> DNA  
 <213> Glycine max

<213> unsure at all n locations  
 <400> 18674

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attcttcctc cattattatc ttgtgcatac actanccaag ctgattccct ttgagatctaa 120
ctcagctcct cctcctcctc cctcctcctc cctcctcctc cctcctcctc cctcctcctc
ctcaggttgg ttaggtaaga tctttagctc cacttgggc ttctcaggtg gacttcctgt 180
tttcaattct tcaaaactgg tcccccttgc aggcatactt tcttcacaa ctaagccttc 240
caagcaagcc cataaattct tcttctcttc actggttaga caatctacaa cattggtcaa 300
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<210> 18675  
 <211> 453  
 <212> DNA  
 <213> Glycine max

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<400> 18675
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tagtaattga ttacccaaaac attgtaatcg actatagctt ttgaaaata attggaacgt 120
tgtaaattca gtttgaaaac tttttcaaac tcatttttgc actggtaatc gattacaaca 180
atatggtaat cgattaccag agagtaaaaa ctcttttgga aaaggttatg tcaaaaattc 240
atgtgctatg caaagtgtta gtgcttggct ctactgagtt ttaaaagaat ggctaaaatt 300
ctgttaaaaac ataagcactt agacaatgaa tgaaagctgg agttgctgca catgatgtct 360
aacattatgt caaggaatca gatcgggctg cacaatgcac aatgcacgat ataatgtcat 420
atgaagaatt gaagctgcaa gatccacgat gtc 453

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<210> 18676  
 <211> 455  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18676

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tatcatgtta	tcacttttag	taaataatta	ttcttttattt	tattatcata	tttattattt	180
tattaaatcg	ttaattcgac	aagtctttga	ttaaattata	ggcttggtat	catgaagaga	240
ttaaataaat	gaaataaaat	tattataaat	ttcattctaa	arbuttorho	attotaagan	300
						360
						420
						480
						540
						600
						660
						720
						780
						840
						900
						960
						1020
						1080
						1140
						1200
						1260
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						1560
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						1800
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						10860
						10920
						10980
						11040
						11100
						11160

a jct ctaca t cagtatcct tctattgtgc tggaactact tcacatggac ttgatggggc	60
ctatgcaagt tgaaagcctt ggaggaaaga ggtatgccta tgttggtgtg gatgatttct	120
ccagatttac ctgngtcaac tttatcagag agaaatcaga cacctttgaa gtattcaagg	180
agttgagtct aagacttcaa agagaaaaag actgtgtcat caagagaatc aggagtgacc	240
atggcagaga gtttgaaaac agcaagttta ctgaattctg cacatctgaa ggcattcttc	300
atgagttctc tacagccatt acaccacaac aaaatggcat agttgaaagg aaaaacagga	360
ctttgcaaga agctgctang gtcatgcttc at	392

agctttgtca ctgggtattca tgttttcattt aggcctttta agtatatgca ttttgattta 60  
tggggaccat cttagagtga aactcatgtt ggaagctcat actttctcac catcatagat 120  
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ttcaagagat ggcataactc tattgaaaaa caacttctga caaaaattaaa agtnttaagg 240

attgacaatg gcoctggagtt ngcttcagag caattcaatg agttntgcag gaaagtatgt 300  
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 aata 364

<223> unsure at all n locations  
 <400> 18679

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 gaagagtcta ggtgggtcga agtgcctaaa aagcacaagg cagtcattgg gtggcacatt 180  
 ttggacctca aggggaattag cctttcttat tgcattgcata aaattatgat ggaagctgac 240  
 tataagtcgg tgagacaacc acaaaagaagg cataatcctt cgaagaaaaa agaggtgcac 300  
 aaggaagtcc ttaaactcct agaagtaggg cttacctatc ctatcttaga cagtgccttg 360  
 gtgagttcag tgcaagtggc tcccaagaag ggtgggatga ctntggtgag aaatgagaaa 420  
 aatgacctca ttccaatcgg aactgtcatg ggatggagaa tgtgcataga atatcgg 477

<210> 18680  
 <211> 403  
 <212> DNA  
 <213> Glycine max

<400> 18680

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 ttccatattg ttgttttcac catgaagccc cctgatattc aagaagatca tctctttcta 180  
 aaggcttttc ctcattctct ggaaggagtg gcaaaagatt ggcataacta ccttgcctcc 240  
 aggtctatct tcaagttgga tgaccttaag aggggtgtct tggagaaatt cttccctgca 300  
 tataggacca ctgcatcag aaaagacatt tcaggcatca ggcaacttgg tggagaaaga 360  
 ttgcatgagt atggggaag attcaagaaa ttgtgtgcaa gct 403

<210> 18681  
 <211> 407  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 18681

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 aggtctcttc attttctctc ttattttttc actactacaa aatatagact taacatcgca 300  
 tgattaacat cggtttttca aaaaatcgat gttaaaaaaa gcacagtaac atttttgtaa 360  
 ataagttgag ttgggttaaca ttgggttttt aaaaaccgat gttaaca 407

<210> 18682  
 <211> 395  
 <212> DNA  
 <213> Glycine max  
  
 <400> 18682

agctttatga ggacagtgcg atgcagcagg tgtttttgat gaacaatctt tattacctag 60  
 tgcggaaagt gaaggactcg gacctaggga aggtcttggg ggataattgg attacgaaac 120  
 gccgtggtca gatacgccag tatgctacag ggtatctcag agcctcttgg agcagggcct 180  
 tatcttgttt gaaggatgaa gggattggag ggagctccaa taatgcatca aagatggctt 240  
 tgaaggagag gtccaagagt ttcaatgctt gttttgaaga aatttacagg gttcagacag 300  
 cttggaaggt accgcatgac cagcttcggg aggagctgcg gatatctata tcagaaaagg 360  
 tgattcctgc ataccgctcg tttgtgggaa gattt 395

<210> 18683  
 <211> 451  
 <212> DNA  
 <213> Glycine max  
  
 <400> 18683

actaagetta tcatcgttgc ttccacattg aaacgggtgt cctgacctat attttacta 60

tagtagacgt acatgtgtga tattataaag atggaaagcc tacactaccc ttctaaatct 120  
 accccaaaagt aacttttttaa taaaaatatt cattctttat tgtaatatta ttttttaatt 180  
 aataatatta caaatagttg cattgtttca ttgaacatga tatacgtcct ggacgaggat 240  
 aaatgaatg catatagaa ttaaacctac acctattttt aagttgtcaa tcaaaaaatc 300  
 tatatatata tactattttc tattactctt t 451

<210> 18684  
 <211> 398  
 <212> DNA  
 <213> Glycine max

<400> 18684  
 agcttttcag ctatttggtt actctcccta agagaatgga gccaaacaaa gcttccttgt 60  
 tgttctctca aagccttgaa atttcaaaa atgctttaag acaggtgaaa tgaagggcag 120  
 ccatgattca gaagtgaat agccacaaag gaatcagatt ccaacatgaa ttgcttgaat 180  
 ctctactcc gtgcaatttc aattccaagc atgatagcct cgagttctgc agttacaact 240  
 aaacaatagc atacatcaat aacaaaagag aagttcgctt tgccattata atccttgaga 300  
 actccaccaa caatggcctt ctctgtgtct ctattgattg aaccattaat attgagtttg 360  
 aactagccat ttgaaggctt gctccaacta atgctttt 398

<210> 18685  
 <211> 447  
 <212> DNA  
 <213> Glycine max

<400> 18685  
 ttagatagtg ggaatcaatg ggtccagata ggttgcattg tgacatactc agaacttcaa 60  
 gtttgtgcaa tgaagatatg gcttggcacc actcgtttcc aattgcagat accttgacac 120  
 catctagata caattctgcc agttttgtga ggttttgcaa gagtgtacct atatttggct 180  
 tctcaagttt tagatattg tgcgaggtaa atgatgtaga caagtcaaga gtagatagct 240  
 tggtagatg agcaacttca attggaattt gcccttgaaa cccagcattt gacaatttca 300

aatacctcaa attcttttagc aagccaaact ttgaaggaat catcgaagaa tggatgtcat 360  
 tgtgtgccaa attcaaaactt tgcaaatatt gtaggttgaa gagacttgaa ttgtccaagc 420  
 cttcaactgat aaattcttca ctcaagt 447

<225> unsure at all n locations  
 <400> 18686

tcctcgcttc caaggctgca tctctatttc tagacttggc ttgcttacac cacagcttcc 60  
 ctogaagcat catctctgat agagatcttg tgtttttaag ctctctctag cgagagcttt 120  
 tttagcttag tggcaccat ttaagtatga gcacgatgta tcaccacag accaacygoc 180  
 agatogaagt gatggaccat gtgttagaag aatactacg ttcatttgtt cattcccaac 240  
 cggcaagttg gttccgttac ctagccttag cagaatagtc gtataatact tccctttatt 300  
 ccagttcagg ctntactccg ttcgaggcaa tatacggcaa gccaccacca gtgttgcccc 360  
 attatcttcc tggatgacc aacaacgagg cggttgaatc actggtaaag ctctgataga 420  
 agatccatgc aaagcttcaa tg 442

<210> 13687  
 <211> 336  
 <212> DNA  
 <213> Glycine max

<400> 13687  
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 ttggtctaat tggattctat cgacaatttg tccagaatta tgcccacatc gcagagccac 120  
 tcactcgctt attgcgaaaa gaacaatttg agtggctctc cgaggcacia ttagccttcg 180  
 acgatttgaa aatagccatg acaaccactc ctgtctcttc cctcccagac ttcaagattc 240  
 cctttgtagt ggaaaccgat gccacagga caggeatggg tgcatttng atgcagcgca 300  
 gccatccaat tgcctacttc agtaagcaat tctatcccaa attgcttctg tctctacat 360  
 acatcgcga gttgcagcgc ataac 442

<210> 18688  
 <211> 445  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 18688

tatgtccatt atcacaaaat ccacgggaaa ggtgaattgg cgaaccttaa ccaagacatc 180  
 ttcactaca ccataatgggc atgtaattgga ggggtctact agttgaagag tcattatagt 240  
 gggagctatc ctgggggttct caattctcgc acacatagaa agaggcataa aattgatgct 300  
 cgcaccaga tcaatgagag ctttaccacac tgacacagtc ccaataaagc atgggatgat 360  
 cacacttctt gngtctttga acttctgtgg tagaattcta tggatcacaa aactacaatt 420  
 tcttttcacc ataagtctct cattg 445

<210> 18689  
 <211> 421  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 18689

tgtcagaact tgtntaaca naaacaaaga aatttcttga tcaacttagt agcctcatac 60  
 ttattttttca ttaaataataa ccattgtaaac ctagaactat catcaacaat agtcaaaaag 120  
 taatgttttc catcatgagt agcatgttga tatgggcccc acgtgtctac atgtatgaga 180  
 tcaaatgggg actcaaaata atgggttattt gaaataaaag agagccttct anatatggac 240  
 aggggggcaga tcatgcaatc tttagaacta tgagatgtca aatgcaatga atttttattt 300  
 gcaaaaagtt tcaaaatctt gtcagataca tgtcccaaat gggaatgcc aagagattgt 360  
 tcaactaagaa cattacaact tgtaactaca ttattancaa ttgaagaatg tgaattcaca 420  
 a 421

<210> 18690  
 <211> 485  
 <212> DNA  
 <213> Glycine max



<223> unsure at all n locations  
<400> 18690

tcaagtatac aactaatact aacatrgcca tgagaacaac tattgatgat tcatgggtat 60

gucattgaag atttggatca ttaacaactc aagctttgat atttctggct caaataata 120

gtaataccac actaacattt gtggaccuat agggacatcg tcaacttca acaac ta 300

tttcatectc ttatttgatg attttcttag aatgacttgg tctacttctt tatagaanaa 360

tcaaaaggtct ctggaatggt caagaatttc aaagctcttg ttgagaaaca aagcacyaaa 420

ca 480

485

<210>

<211>

<212>

Glycine max

<223> unsure at all n locations  
<400> 18691

attnttatat atacacgcgc gaaatggggg ggacgtgcga tgaggctggg aacatgaatc 60

tataggccac tgggccaatg cgcgcggtta tetgaaaggg tccataaaac cgcttggcta 120

gctaggaata tgtcggagcc agcgacgtct gccggtatgg tcggaagcgg acgtgtaccc 180

atacaccac ctcataagat atatcgcggc ggtgtttatc ggcagcaacc ttcatgagtt 240

cctgcgctcg ttgaaggcgg cgcgtcaatt gcgctgtac ttgcagacg gtggtgagta 300

gogagtcaac ggcattcatc gacgattgac ctgggagata g 341

<210> 18692

<211> 302

<212> DNA

<213> Glycine max

<400> 18692

ctggaactac ttatttggc ttcattgggc ctatgcaggg tgaagcctt ggaggaaaga 60

ggtctgcta tgttgttgg gatgatttct ccacatttac ctacgtctac tctatctgag 120

agaaaccaga atcctttgat gtattcaaag agctgagtct cagacttcaa acacaacagg 180  
 actgtgtcat caagagaatc aggagtgcac atggagata gttctaacac agcaggttca 240  
 ctgaattctg cacatctgat ggcatactc atgacttctc tgcctgcatt acaccacaac 300

<211> 14  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18693

tattencttc attcaattct gagcgtctcg atatatgacg agactcaalc agacatccga 60  
 gtaaaaagtt attgtcgttt taattggctc agaggttcaa cattaaattt cgagcgtctc 120  
 gctatattac gggactcaat caaacatcgg agtaaaaagt tattgtcgtt tgaattggct 180  
 caaggttcca acattcaatt ttgagcgtct cgatatatga cgagactcaa tcagacatcc 240  
 gagtaaaaag ttattgtcgt ttgcatttgc tcagaggttc aacattgaat ttcgagcgtc 300  
 ccgatatatt acgggactca atcagacatc cgagtaaaaa g 341

<210> 18694  
 <211> 451  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18694

ttgagccaat tcaaacgaca ataactttta ctttttgtgt gatgagctc gaaatataac 60  
 gagacgctcg aaatagaatg ttgaagctct tagccaattc aaacgtcaat aagtatttac 120  
 tgggatattct gattgtgtcc cgtcatatat cgagacactc gaaattgaat gttgaagctc 180  
 ttgagccaatt cagatgacaa taacttttta ctgggatgtc tgattgagaa ccgtaatata 240  
 ttgagacgtt cgaatttgaa ttgtgaacct ctgagccaat tcaatcaca ataactatc 300  
 actgggatgt ctgattgaga ccgtaatat atcgagaccc tggaaattga atgttgaagc 360  
 ttgagccaa tcaaacgac cataaattga tactgggag ttgattgag tccagttata 420  
 tatcgagacg ctgatatag aattttgaat c 481

<210> 18695  
 <211> 416  
 <212> DNA  
 <213> Glycine max

tgaaagttat tgcatttta ctctttatag agctttcgtt ntcaatttcg agcgtctcca 120  
 tatattaaag ggcacaattg gacatccgag tgaaaagtta ttgtcgtttg aattttctca 180  
 gagcttctgt ttctgattac gagcgtctcc atttattacg ggactcaatc ggacatccga 240  
 gtcaaaagtt atagtcgatt aaatttgcac agagctttag ttttcaatta cgagcgtctc 300  
 gatatattac gggatacaat cggacatccg agttaaatga tattgtcgtt tgacttttct 360  
 tagagcttcc gttttcaatt tgagcgtctc gatatattac taaggctcgat cagaca 416

<210> 18696  
 <211> 429  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18696

ntgagcacat tcaaacaaca ataacttttg aatcgaaggt cngattgtgt ctcataggat 60  
 atcgagacgc tcgtaattga aaacagaagt tcttagaaaa atcaaatgac aataagtttt 120  
 aactcggatg tcttattgag cctgttaata tctcgagacg cagcaaattg aaaacggaag 180  
 ctctaagaaa agtcaaacga caataacttt taactcggat gtccgattga gtgccgtaat 240  
 atatcgagac gctcgtaatt gaaaactgat gctctgagca aattcaaatg acaataactt 300  
 ttaactcgga tgtccgattg agtcccgtaa tatatcgaga cgctcgtaat tgaaaacaga 360  
 agctctgagc aaattcaaat gacaataaca tttcaactcg atgtccaatt gtgtcccgaa 420  
 ggatattcga 429

<210> 18697  
 <211> 436  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18697

agccttttatt tttttggaat caaataaaaac accaagatag tctcatattg taaaattggc 60  
 tttctctctc tcaatagaat taatttattt atcattatc tacaataat attcatttgc 120  
 tttctctctc tcaatagaat taatttattt atcattatc tacaataat attcatttgc 180  
 tttctctctc tcaatagaat taatttattt atcattatc tacaataat attcatttgc 240  
 tttctctctc tcaatagaat taatttattt atcattatc tacaataat attcatttgc 300  
 tttctctctc tcaatagaat taatttattt atcattatc tacaataat attcatttgc 360  
 tttctctctc tcaatagaat taatttattt atcattatc tacaataat attcatttgc 420  
 tttctctctc tcaatagaat taatttattt atcattatc tacaataat attcatttgc 480

<210>

<210> Glycine max

<223> unsure at all n locations

ttttatcaaa ttttgtctat atcacatgtc ctgctaaagc atttagtgat atgaactata 120  
 tacaatattt gataaaatat atattacaaa aacatattaa taacaattat tcatatttga 180  
 tgatattttt taaatgttgt caaaaactat tcacaatatt tttactaaaa tgtgacgggtg 240  
 tatataaatg ggtagtaaat agtaatcctt ggctattccc tagtattagt acaactattc 300  
 atgtatatto acaaatgtac gtagatattt attaaaatat ttttttctaa gaagtaaaac 360  
 taaaataaaa aattgaaata tatatgtata caaaacataa attagaatta ctctatatat 420  
 gataaagaac gtntaaataa tgtcacatta cagctaccta catgtatgag tacctcatta 480  
 tatatccatc att 493

<210> 18699

<211> 424

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 18699

agctattggt acgattcact gngacagtca aagtgtcatt cacttaacaa atcaccaaat 60  
gtaccatgag aggacaaagc acatagatgt gaaactacac ttcacacagag atgtgattga 120  
atcttadaag gtaaaatgac adaagatgac acagaagaaa accatgctga tttttttaca 180  
tcaaggtgga gatttgtggt gtgtgactca naatcacaat tggcacaagt gagaaggctt 360  
tanagtgggt ctgtcataac tgtntcagt tattataach tgaattagtt tggcaccaaa 420  
gtat 424

<210> 18700

<211> 339

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 18700

ttcacgagag cttccgttgt tcaatttoga gtgtcactat atgtgatgag cctaaattgg 60  
acattcgagt taaatgttat gaccatttga gattctcaag aacttccgtt gttcaattct 120  
gagcgtctcg ttatgtgatt tgctgaatc ggacatccgt gtgaaaagt atgaccattt 180  
gaatttctca agagcttccg ttgttcaatt tggagcctat cgacatatta tgcgcctgaa 240  
tcagacatcc gtgtganaag ttataacat ttgaatttca tgagaagctt cgttgttcaa 300  
tttcgagcat ctctacatat tatgcgcccg aatctgaca 339

<210> 18701

<211> 438

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 18701

ttttttgata tggagatcaa attgaccttg aagctatgta tatatacaac atcctctaag 60  
tatagaaact gaaaaattg cactgigcct acatgagttg caatgaattg gaggccaatg 120  
ggaagcttaa aattatggga ttatcttct tacaagaaga aaataagtaa gaaaaagtta 180

tgacatgac agtggcttct gaattgagta tccattcacc tggacctgtc ttgcttacac 240  
 tacaagtaat ggataagaca ttacctctgt gtgcattgct ggaaccaatg attgtactaa 300  
 ttgattcacc atgntgaatt gtgtgactcg agctctattg ctacagcang gccattagag 360  
 ccttataatt ttgagaatgc aacttatta tadtactttg ctatcttga ttatttataa 420

<210> 18702  
 <211> 386  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18702

aacttgtttg gntctacttc tctgatcacc tggtaataaa gccaatgttg aaaattttctt 60  
 gggactcact atctcaagtt tctcagtaat ttcttgaat gtctgaacaa ggcacagcct 120  
 tatgaagcac cctctataa gccgcacga atttaactcg gggagactag gagcatcttt 180  
 taactccaga tccaagcaaa atggggagtc ttttagccac atctgagag agtgagcctt 240  
 ggccacaagg atgccttgtc gtgtcttaca aggaagaaaa ggcgatccca tttccanag 300  
 gcatgccttc aatgtgctgt caagagatac catgttatac tctngctgtt cccgtataag 360  
 tacaactgga tttggtgact ctggat 386

<210> 18703  
 <211> 438  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18703

agcttatggt tattgtaagg agaataaaac aatccanaat caattgtacc tttcaagtaa 60  
 tgaagaattc tttttgcggc ttttagatgt ggagaggtag gagccttcgt aaagagacac 120  
 acaactccca cggcatatag aatctcgggc cttgtattgg ctatataact taaactcccc 180  
 acaagactct tgaagatcgt ggagtctacc ttctgtcctt catcaaaatt tgataacttc 240  
 aagccacttc cataggtgt gtccacagga ttgcaatcaa gcataataaa tttcttcaac 300  
 aattcttttg tttaccttc ttgtgagaca aagataaacat tctcgtttg ctacacttcc 360

attcccaagt aatatgacat aagtcaccata ttgtgcataat canattcacg agacatggac 420  
tccttgaagt cttcaaac 418

<210> 18704  
<211> 418  
<212> DNA

<213> Glycine max  
18704

gttataggtt tcatatatgt ctccaccatag atcttactcg tcttggagta gactctggtg 60  
atgatagttc ttgatcttgt tgttgggttg gaggtgaagg tggttcacct gggctcttctt 110  
cttcagctat ttcttgaggt agttgagcgg gtataagaac attcttttcc actttttctt 160  
caacccaatt ccaagaagcg tactcatcaa cttcaacatc tcaactgatg acgagtttct 240  
tagtttgcaa gttgtagaca cggtagcctc tagagatatt gotataccca aggaagatac 310  
cttgtatagt cttgtcttca agtttctgac tcttcacgtc tggaaatata atgtagcata 360  
tagatccaaa gacccttang tgccttgcgt atggcttctt nccgttccaa gattcaattg 420  
gagtcttgtc ttttacagac ttnagtggaac atctgttgag tgtgt 465

<210> 18705  
<211> 426  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18705

ttctttatgt ttatgaatca agttgattca agaagtttag ataatgacaa agatgtagac 60  
aaaaagccca aagaatgatg tcaagattaa atcaagaaca aattcaagaa tcaagagaag 120  
tttgatttca agattcaaga aaagatgaat tcaagttcca agagaagaaa tcaagaagac 180  
ttcacaaggg aagtattgaa aagatttttc aaaaaacaac atagcaacag ttgttttttc 240  
aaaagagttt ttctcacaag ttcttaagtt accagagttt ttactctctg gtaatcgatt 300  
ttcagtttcc tataatcaat taccagtgaac aaagtttgat ttcaaaagtt ttcaactgaa 360  
tttgcaacgt tccaattgat ttcanaatgg tctaategat tacaagatat tggtaatoga 420  
ttacca 426

<210> 18706  
 <211> 483  
 <212> DNA  
 <213> Glycine max

<223> sequence at a few locations

ttttaacaac tcattagatt ctcaattcac taatacattg gacagaaatg tgtataacct 180  
 tttttctttt gtaaactact ctataagggc tcacatcacg totctattaa gcataatata 240  
 ttttacaagc taattacata atatatttaa attggactca tccattcata taacataaat 300  
 aaattccaat ctaagaagag gaaataaaga taaaatttat acacttagaa nataaggcat 360  
 ataataaata gaaatttata acaaaactca attcatacaa gtcattctcat atacaagtac 420  
 atcaacaaaa tattgtcaaa ccaagatata atagtccaat tactaaacat caccatgtga 480  
 cat 483

<210> 18707  
 <211> 478  
 <212> DNA  
 <213> Glycine max

<400> 18707

tgagagagag acaccttttg gttgcaaaca atgtataata aataagtgtg acacctaaat 60  
 tccaagcatg caaagggttc acatagaaat acaaaaacta acataaataa ataaaggggg 120  
 gttttcttga aatttcctga atggattaca attaccaatg gtgggggaaa gatcttcaac 180  
 caaagctga caagtatgct actttttacc accctggcat ctccaatcaa 240  
 caagatcttg aaagagagat catagccact gctctgacat caggatgaac tcattctctc 300  
 tctctctgat gaatgtctta cgtgtgtgtg tcaaaaagta cagtgaagaa tacgtatona 360  
 aggggtgaag atatatagag gcttatgggtg ttgggctacg gaaggetaac ctgtaacgaa 420  
 gacaatgttg caaccttttc attattgggtg gagagataat actgaagaga gagagata 478

<210> 18708  
 <211> 416



<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18708

agcttctcctt ttactttatc gtcatttcta tatcaagta tagataacca tttcaaaact 60

cttaatgcaa tagcaaacac ataccagtcg caaaactttc ttaccacag actgaacata 240

atccagcacc cattaaatta ccaaagaact tccaacccgt ggggacctgg ttgtgaataa 300

caattaaata aaataattgc atgtcttaana gccatcaaca agtagtttca tacttaaaag 360

acattgaaga gcaatatacc tcanagaatc tcanattcag atgtttggca acaaca 416

<210> 18709  
<211> 429  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18709

agcttttatg atatgattac actatcaagt ataagccagg gtttgctaatt gttgttgccg 60

atggcgttgtc cagactcttc tgcaccgagg tctcttgctt atcattaatt atgcttcatt 120

tcactntttt gcatcaactc cgtcacactt tgttacagga tccccaatat gttgatcttc 180

tgcataccat taaattgcgc ccagatgctc actccaacct cgccattcat aaggacctta 240

ttttccgaca aggcgtgatt tagattccct tcccaacccc ttttactgcc ttactcttag 300

aggaatttca ttcttctcct ctgggaggtc acacaggggt atcaaaaact ctccattggt 360

taagacaaat atttgattgg tcaatatac aganagatgt tcttcggtac atcgcgcaat 420

gtccacgt 429

<210> 18710  
<211> 429  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18710

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ttcttttctt tgcaactaaa tcttgctttc tttagttaat tntataaaca gtattttaca 60
tgtatgaatt attttcgaat tataaaaaatt tataaattaa aatataaaaa aataatattt 120
aaatattttt attattntaa ttacacaggta ttttaatttta tcacaatat attattataat 180
ataaattaat atattattat atataaaaa: ttcttcttat ttattattaa ttatataaaa 240
ttatatttat ttattattat ttattattat ttattattat ttattattat ttattattat 300
ttattattat ttattattat ttattattat ttattattat ttattattat ttattattat 360
ttattattat ttattattat ttattattat ttattattat ttattattat ttattattat 420
acataaaat 429

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<210> 18711
<211> 461
<212> DNA
<213> Glycine max

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<223> unsure at all n-locations
<400> 18711

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```

tatgctgcan atattttaca tagacctcct caatctcagt atanaaatca accacagcag 60
aacaattatg acctctccag caacaaatac aaccttggat ggaggaatca cctaacctc 120
agatgggtcca gccctcagca acaacaacag cagcctgctc cttccttcca aaatgtagct 180
ggcccaagca gaccatacat tctccacca atccaacaac agcaacaacc ccagaaacaa 240
ccaacagttg agyccctcc acaaccttcc ctgaagaac ttgtgaggca gatgactatg 300
cagaacatgc agtttcagca agagaccaga gccctcattc agagcttaac caatcagatg 360
ggacaattgg ctacccaatt gaatcaacaa cagtcaccaga attctgacaa gctgctctct 420
caagctgtcc aaaatcccaa aaatgtcagt gccatttcac tg 462

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<210> 18712
<211> 417
<212> DNA
<213> Glycine max

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<223> unsure at all n locations
<400> 18712

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agcttctgtt tttttaaact ggttccacaga agacaacagg gagtgaagat tcttqaanac 60
cttagccttg caacaattcc taggaaagta gataaggaga tggacaagaa aatctgcagt 120

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attgtgagta gcatttttgaa agacgectct gtgectgaag ctgatgaaga tgtcccaaca 180  
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 ccnatgctg aagtaactctc tttcccccagc aaagagagat caacagagga agatgatcaa 300  
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<210> DNA  
 <211> Glycine max  
 <212> unsure at all n locations  
 <213> 13714

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 ttttctgtt 300  
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 gatgtgcgaa caa 433

<210> 13714  
 <211> 392  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 13714

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 aactagctca acaaggacgc tgtgtacttg ctgatgaat agtgcttgaa cgcattcaac 120  
 actatataga ccagcttagt gtctactacc gtcattacaa caccagattg gagccaagaa 180  
 ttttagctca tgtgtgatgc aagtgattat gttgtaagcg ctgtattggg ccacaggaag 240  
 ggttagaattt tccatgctat ctattatgcc aataaagatt taaatgatgc tcaattgaat 300

tatggcacca tatataagga aatgctcagc cttgtctatg ctctggagaa ctcagatcat 360  
acttaggtga tcaagttat tgttacactg ac 392

<210> 18715

<211> 144

<212> 144

<213> 144

<214> 144

<215> 144

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gaatanitca caaacttatt ccttttaatt aaaaattctt aatttgattt ntaacccaaa 180  
tctaagatt ccttttaaaa tgaattccta aataattatt caaatiaaac ttactgaata 240  
gaagcaataa gcaataataa ataaaagagt ttaagggaag agaaaagtgc aactcagttt 300  
tatactagtt cggccacacc cttgtgcata cgtccagttc ccatggaacc cgttgagag 360  
ttccactcaa tcgcaaaaac cctttacaag ttctgaacca cacaaggaca acccttcctt 420  
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<210> 18716

<211> 436

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 18716

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aagctcacc ccatgacaaa atacatgaaa atacaaaaaa gtcctacta caaagactac 180  
tcaaaatgct tcgaaataca aggtctaaaac cctatactac tagaatggcc gaaatacaag 240  
gcctaaacaa aggtaaaatc tattctaata ttacaaaaga taagcaggtc catacttagc 300  
ccatgggctc gaaatctacc ttaaggtcga tgagaacctt agggccttcc cttggatctc 360  
tggcccaatc taactggagt cttctatcca atgcccttgc gggatatgat tgtatcattc 420  
ctccttctt ctcat 436



<111> 428  
 <112> DNA  
 <113> Glycine max

<123> unsure at all n locations  
 <400> 18719

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 ttaagcttt tagtgacaga atttaccaga aaatcttacc ttaagcttt tagtgacaga atttaccaga  
 aggtctcttt caagctctctt tctttcttgg gctataaggt tcaaaatctt gcttgggaaca 240  
 gaaaggggc ttgtctcttt gcaccactct ntccgtccgc cgatcatcca ctacaacata 300  
 aagccaagta acattntgct tgacgaaaat tacaatgcc aatctctgga ttctggggttg 360  
 gctcgggttc tgacaaagct ggacagggat gtgatgagca acaggtttca gattgcatta 420  
 agtatatgt 428

<110> 18720  
 <111> 342  
 <112> DNA  
 <113> Glycine max

<123> unsure at all n locations  
 <400> 18720

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 gatattgtgaa ccattgggtc acacgatact aaattaatgt tttaggggga ggatccacta 180  
 cagtagcttg ctaagttgct actgaagccc ttatgtgttg ctcatgcgtt gcactactac 240  
 atggggttgg acaccgact aaaccagttt ctaagttttt atttgagca tgatgctagc 300  
 aacatacgac tattatagtt aaattacaga attatttcat ta 342

<110> 18721  
 <111> 468  
 <112> DNA  
 <113> Glycine max

<400> 18721

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catgtttcttg ataagaggag aaagaagttg gatgacaaga gtgagccaat gatttttgg 120  
ggatacaact ctactgggtc atacaaaacta tacaatccaa agaatcaaca agttctatct 180  
agtagagatg tctactttga tgaatttaagc tcatggggag agtttcaacc tacttctgag 240  
acaatcacaa agattcactc tgaatttaaa aatcattatc cactaggaga catcacacaa 300  
tctctctctc tctctctctc tctctctctc tctctctctc tctctctctc 360  
tctctctctc tctctctctc tctctctctc tctctctctc tctctctctc 420  
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<310> 18722  
<311> 475  
<312> DNA  
<313> Glycine max  
<323> unsure at all n locations  
<400> 18722

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ccaaaaaatt tgnrtagtgg agacaataat ttttttatca atggcaataa aaacaccaca 120  
acaactatca tttatataga tagatagata aatatatacc caaatattgt tattgatcca 180  
taataaattt tttttcattt ttgttccctg atatttgaca tggtttttta aattgtagtc 240  
attagtttaag tgatgacatg tctactactaa aaaatagggc ttcaacattg gttattaagg 300  
actttccaca tgggttatta accgatgatg aaagtaacca cgttgaaagt aatatcgtaa 360  
acatcgattn tccaaaaccg atattaatat aaaattacaa catcggttat tgaaataact 420  
gatggtatat aataagaatt ataaaaaaaa gtaatatatc ttcatatcaa catcg 475

<310> 18723  
<311> 474  
<312> DNA  
<313> Glycine max  
<323> unsure at all n locations  
<400> 18723

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tcttaagaca gcaatgtaaa gatgtacgt atgataatag caaggcaaat tgaatatgaa 120  
taigtatatt gttatttcat tcatccttg cagatatat ataatacatg tacaagaatg 180

ttctatacca attctaaggc atgacagacg tgatccataa tcagtggcat ctgattttatt 240  
 ctatgcatta taagggtaaat aaatatagaa tcaaggtaac ataggaaagt aaatatatac 300  
 acagcatatt tgcattcatg tagaagatat ttcttaatac tccctctcaa gtgggtgagt 360  
 caatctcttg aacttccaaac ttgttgcga aatcacaaa ttatctttt cccatattt 420  
 ttttctctct ttttctctct ttttctctct ttttctctct ttttctctct

<210> 18724  
 <211> 462  
 <212> DNA  
 <213> Glycine max  
 <400> 18724

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 tgatttacia atatgtttta taacagctac taatatttga attcgatatt ctgactgtg 120  
 taatcgatta cacaattttg gtaatcgatt accagcagtt aataaagtc ttaattcaaa 180  
 ttttaaaagc tgtaatcgat tacacaattc ctgtaatcga ttactagaca ggattttcag 240  
 aaaaatattt ctaagagtca caacttttca aaggctttat tcatgactac caatgatcta 300  
 tatatatgtg acttataaca cgaaattgct cagaagtttt cagaacaaca agtgtttatc 360  
 ctctcaaaga gcaaatcat tttatctct taagaattcc ttggccaatt caatcgcaat 420  
 tcattaatga attatttgag tgctcaatct gtaaaatcta tc 462

<210> 18725  
 <211> 456  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 18725

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 tagtgaaaaa cttcatagtg ccacctcaa ctaccccaac tatgataaag agctttatgc 180  
 ctttaataaga gccctcaaaa ctagggaaca ttaccttggt tccaaggaat ttgtcattca 240  
 taatcatcat caatcattta agtacttag agggcaaaagc aagttaaaat agaggcatgc 300  
 ataattgggt gagtacctag agcaatttcc atatgttata aaataaaaaa agggaaatac 360



aaatgtggta gctgatgccc tctctangag acacacattg ttttgcctcc tacgagctca 420  
 aaatttagga ttgataata ttanggactt gtatgc 456

<210> 18726

<211> amino acid sequence  
 <400> 18726

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 ggcgaaaaac tcttgaacta ngaagatggt gcccatcacc tttttgttct taatgaaagc 120  
 agtttgagtg tccctaataa tagtctcaag cactggggct atgtgggttag ccagaatttt 180  
 agataacaac ttgtataaca aattacagca agatattggt ctaaaatggt taacctgcga 240  
 ggcttgatca tgcttagyaa taagcgcaat aataqcatgg ttgagctgct ttagaatttt 300  
 tccagttgta aagaattcat taaccgctgc agagatataa tcaccaatga tatctcaagg 360  
 cttcttgaag aataaaacat tgaaaccacc tggcctagga gcgttattgt atccatcaca 420

<210> 18727  
 <211> 451  
 <212> DNA  
 <213> Glycine max

<400> 18727

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 ttataacgaa acgctcgaaa ttgaatgttg aagctttgag ccaattctaa cgataataac 120  
 tttttactcg gatgtccgat tgagtctcgt aatatatoga cagcttcgaa attgaatggt 180  
 gaagctctag gctatttcaa acaacaataa cgttttactc ggatgtccga ttcagtgacy 240  
 taatatatcg ggaagctcga aattgaatgt tgaacctctg agccaactca aacgacaata 300  
 aatttatact cggatgtctg attgagtcct gtatttatat gagacgctcg aaattgaatg 360  
 ttgaacctct gagccaactc aaacgacaat aactttgtac tcggatctct gattgagtc 420  
 cataatatat cgagacgctc gaaattgaat g 451

<210> 18728

<211> 360  
 <212> DNA  
 <213> Glycine max

<400> 18728

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tacatggcta aaacctata ctactagaat ggcaaaatat aaggcctaga caaattatga 120

acatattcta gtatgtacaa agataagcgg gtcataactt agcccatggg ctcgatatct 180

accctaacgc tcatgagaac cctatggcct ttgcttggat ctgtagccca atctacttgg 240

<210> 18729

<211> 346

<212> DNA

<213> Glycine max

<400> 18729

agctttgagc ttttcaaag gtcataaata gtaactcgga ggtccgattc aggcgcatat 60

tttatcgtga cgtcggaaat tgaacaacgg aagctctcaa gaatatcatt ggtcataact 120

tttaactcag aggtccgatt caagcgcata atatatcgag acgctcgaaa ttgaacaacg 180

gaagctctca agaaatttaa atagtcataa cttttaactc ggaggtcgga ttcaggcgca 240

taatatatcg agacactcta aattgaacat cagacgctct agagagaatc aaatggtcac 300

aacttttaac tggagggtcc gcatcaagcg cataatatat cgatac 346

<210> 18730

<211> 457

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 18730

tgtanggtta aagtctcagc aatgtcatgt gtcctagcaa caattgttag ccgtggctat 60

agagatatc ttgcbaaaca aagtcttggt agcgataact cgcctgtgct ttttcttcca 120

tgtatatgt ataaagtca ttgatccagt caagtttggat gacttggaaa atgaggccgc 180

aattatactg tgcacgttgg agatgtatct tccccccgct ttctttgaca tcatgattca 240

cttgattgtg catctgggta gagaaatcaa atgttgtggg cctgtatata tacgggtggat 300

gtaccocgggt gagcgatata tgaagatctt aatagggtat acgaagaata tatatcgtaa 360

agaagcatct attgttgaga ggtacattgc agaagaagcc attgaatttt gttcagaata 420

-----

<211> 444  
<212> DNA  
<213> Glycine max  
  
<400> 18731

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ttctcgagag cttacgatgc ttaatttoga gcgtatcgat atatttatatg cctgacccgg 120

acttcacagc gaaaagttat gaccatacca atttcaagag agcttaagtt gtgcagttcc 180

gagcgtatct atatgagatg cgcgcaccta gaacatccca gtgaaatgat atgaccatgt 240

gaattttctc agagcttacg ttgcgcgaatt tcgagcctat cgacatgtta tgcgcccga 300

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ttcgagccta tcgacatatt atgc 334

<210> 18732  
<211> 444  
<212> DNA  
<213> Glycine max  
  
<223> unsure at all n locations  
<400> 18732

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ctgcaattaa ggcagccccc atagcaaccg caactgagct tggatagggg tgaccacaat 120

ttagcttggc ttccaacaa ttaggcaatt cccctaactct tcttaccatt ttctccactc 180

ttccacccc ttcttctcc ttctctctac acaccaacag acttttacta ctgttaggac 240

catttttata ttcttttct ctcccatgta tcttgatcag cagcccatca gaactcaatt 300

aaattaaaat acaactcang cagaacaaaa aatctgaata ttatttggac agtgaggtct 360

ctcccaagtt tgtctatgtt tcactgcgta acttatggag attaacataa atgacttggg 420

acagttgcga gggacacaca aagc

444

<210> 18733  
<211> 416  
<212> DNA  
<213> Glycine max

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tttgcctctc catgcagcaa cctggagcaa ttgagcagcc tgaagcttat gctgcaaata 180  
tttacaatag aacctctcaa cctcagcagc aaaatcaacc acagcaaagc aattatgacc 240  
tttccagcaa cagatadaac cctagatgga ggaatcaccc taacctcaga tggctccagcc 300  
ctcagcaaca acaacagcag cctgctcctt ccttccataa tctgcttggc ccaagcagac 360  
catcattcc ttcacaaatc caacaacagc aacaacctca gatacagcca acagtt 416

<210> 18734  
<211> 468  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18734

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cctgaggtat aatgccgaag tgaatccctt ttganaagcg gtcaacaacc acaaggagta 120  
caatcttgcc ctgaaaaaaaa ggaagaccaa tgacgaaatc aaggagagag tctctccatg 180  
gtctgaatgg aactggaaga gggcacaaca agcccacaat atgtttcgtt tcatatttcg 240  
tgaattgaca tccaatacaa ttagctacaa agttggcgac atcagctcgg agacctggcc 300  
aagttaaatt ctccgacaac catgttattg tctttgtgac tccaatatga ccccccatgg 360  
gagtggcatg gtattcgatc aagagagatt gaatgagtg aagatcatgg tgttaaccata 420  
ctctgccctt ctggagaatg agattentaa taatggtgaa gtctggat 468

<210> 18735  
<211> 428  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18735

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tctaaagtt aaaaatattt caggcataaa ttaatttata gaagctatct tatatagctt 120  
gaaatattca tttattata tttc tttt tttt tttt tttt tttt tttt 180  
attcatccaa acacgtctca ttntaacagt taacataaac catcaagatt atatatactt 240  
tatctcttaa attatttttt actttgaagg agtcaagata aaagtcatta taatgcatgt 300  
gtuaagaana tactacaact catgcaagtg catatatcga tatgtttagt atatgaaaat 360  
tatgaatc 428

<210> 18736  
<211> 475  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18736

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tagctacaca caccctctca taactaagct caccctcttg agaagcttgc ttaagaagat 120  
tcttaaagaa tctagagctt agctacacac acctctctaa tagctaagct caccctcttg 180  
agatgagaag ctagagctta gctacacacc ccttataata gctaagctca cccctatgcc 240  
aaaaaatatg aaatatcaaa aaaagtcctt actacaaaga ctactctaaa tgccccaaaa 300  
tacaaggcta aaacctata ctactagaat gaccataata caaggccan acgaaggana 360  
aacctattct aatatttaca aagataagcg gactcactct tagcccatgg gctcgaaatc 420  
taccttaagg ctcatgagaa ccttanggcc ttccttggga tctctggcac aatct 475

<210> 18737  
<211> 423  
<212> DNA  
<213> Glycine max

<400> 18737  
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atataatcgag acgctcgaaa ttgaatgttg aagctctgac caaattcaaa cgatgataac 120  
 tttttactcg gatgtctgat tgagtcocgt aatatatoga gacgctcgaa attgaatggt 180  
 gaagctctca gaaaattcaa accataataa atttttactc ggatgtctga ttaagtcccc 240  
 tetgaagctc tgagctaatt caaacgacaa taacgctttg ctgggatgic tgattgagtc 420  
 ctg 423

<210> 18738  
 <211> 341  
 <212> DNA  
 <213> Glycine max  
 <23> unsure at all n locations  
 <400> - 18738

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 cagaaatgaa ccagcaaacc aaagttctga accatacttt agagcaatat ctcaaagtct 180  
 tggtcagtga cacaccaact cgtcggttca actatctctc actggcagaa tggcggtata 240  
 atacatccat tcattctgct acaagaatta ctctctttga agcaacttac ggcaaggtcc 300  
 cttctctctat tctcgggtact tgatgggata gtccagcgta t 341

<210> 13739  
 <211> 407  
 <212> DNA  
 <213> Glycine max  
 <400> 13739

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 caaaaagtta ttgtcatttg aattttgtgt attcattttt tagcatcaag aattattaaa 120  
 tgatcaatc gacatccga gtaaaaagtt attgtctgtt gaatttgctg acagcttttg 180  
 tattcaattt cgagagcttc gaattattaa atgactcaat cggacatccg agtaaaaaga 240  
 tatttcaatt tgaattttct tagagctttt gatitcaatt tggagcactt agaattatta 300

aaggactcaa tcggacatcc gagtaaatag ttatggtcac ttgaatttgc ttagagttac 360  
 tggctctcaat ttctgtgcgtc tcgatatact ataggactca atcggac 407

<210> 18740

<211> 460

<212> DNA

<213> Glycine max

<400> 18740

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 tactcggatg tctgattggg tcacgtaatg tctcgagtca ctcgaaactg aatacagaag 180  
 ctgagagaaa attcaaacga caatgaactt taactcggat atcccatiga gtcccgtaat 240  
 atatcgagac gttcgaaatt gaatgtagaa gctgtgagaa aattgtaacg ataataactt 300  
 ttactcggga tgttcgattg aatcccgtaa tatatcaaga cgtttaaact tgaacacaga 360  
 agctcgtagc anactcaagc gacaataact nttaactagg atgagtcctg taatatatcg 420  
 agatgctcga aacttataac ggaagttcgt agcatattca 460

<210> 18741

<211> 375

<212> DNA

<213> Glycine max

<400> 18741

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 agagagcatg aatgaagag ccaatgggtg atacatggac ggagatgaaa aagatcatga 120  
 ggaagcggta tgtgccggct agttactcaa gggacttgaa attcaagctc caaaaactaa 180  
 cccaaggcaa caagggggtt gaggagtatt tcaaggaaat ggatgtgctc atgattcaag 240  
 caaatattga agaagatgag gaggttaacta tggctcgatt tcttaatggt ttgactaatg 300  
 atatccgtga tattgctgag ctgcacgaag ttgttgatat ggatgatttg cttcacaaag 360  
 caatccaagt ggagc 375

<210> 18742

<211> 429

<212> DNA  
<213> Glycine max

<400> 18742

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aaatcagtta gatacgaagt atgatttgot tcaagagtaa gtaattcatt cttaatagct 24  
ttctttaata cagtttcata cttaacagct tatgcataat ttttgggttc agaaattttt 300  
gaaatggcta aggtatatat ttgagatgac taggagacaa atgatgatag gacagaacag 360  
tggataagga atataaagca gtacctgaag tagaagacag gaacctgctg agttagaaga 420  
ttgcatgta 429

<210> 18743  
<211> 427  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18743

gaatgacata ctcttgttgg acatcaactt gtgttcaaaa ttattagttn taaggactga 60  
caatggcctg cagtcgttca aagcagttca atgagttctg caagaaaata ggcattcaaaa 120  
ggcacataat agtccctcac acaccacaac aaaatggttt ggcagaaaga atgaataaga 180  
ccattttgga aagagtgagg tgcataactt ctaatgcatg actgccaaag acctttctggg 240  
gagatactgc tacaccacag catatttgat aatagatgtc catcatcagc cttatgtttc 300  
aagacactaa tgggaagcttg gagcggtgaa ccacctgatt attcatgatt aaaggcgttc 360  
tgatcactgg ctcttcgtca tgttaaacaa cgaatgctgg atgcaaggtg tataaagtga 420  
gtgttca 427

<210> 18744  
<211> 417  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18744





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 ttgcacatgac tctctctgtc aagctctcca accgtgaacc cctcgtgaag tccactcaca 360  
 tttctgtt tttctgtt tttctgtt tttctgtt tttctgtt tttctgtt  
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<210> 18747  
 <211> 367  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 18747

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 tgcacatgta ccttaaacac tgtaaccgct gagattccca tatgctggaa agtcattaat 180  
 ggtacaaaaa agcattgcac gcatttcaaa ggtctccttg cgaaacgcac canacactac 240  
 aacccccctg tcccacaact ttctcagatc ttcaaccaac ggacttagat aaacatcaat 300  
 gtcatttctt ggtctgtctg ggcccgatat catcatatc agcgtcatgt gttttcgctt 360  
 catgcac 367

<210> 18748  
 <211> 446  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 18748

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 agttgcacat ggaaaaagag gtccattttc ttgatcttc tgtactagtc tgatctagat 180  
 gttagacatt gttatgatgt tatgcattgt gagaaaaatg tatgtgacag tctgattguc 240  
 atgtctctta acattcaagg caagatgaag gatggcttga ataccggtca agatctagct 300  
 aatcacggga tacaatcata gtgcatcca aggtctgatg ggaagaaaat ttaattgccc 360

ccagcttgcc atactttgtc caaaaaggag aagatcccggt tttgtcagtt tcttcgtcgg 420  
gtgaagggtc cacaaggata ctcttc 446

<210> 18749  
<211> 330

ctagc gct catgacccc agatgatgc ataanaggac aaagatctgt atggtgatct 60  
atagaagaac atagaccaca gactctttca acaggtgtag attttttatt catggcaagc 120  
caatctcttc caatctcttc caatctcttc caatctcttc caatctcttc caatctcttc 180  
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<210> 18750  
<211> 330  
<212> DNA  
<213> Glycine max

<400> 18750  
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atataataat gaactcgttc cattaaactaa aattcaatta cgagataaag catagatacg 180  
aaagattatt acatagatta tgtacttggc taaacttaaa ggagtgttgt tcgcccggcg 240  
gtgggaggtt ggcgtgacy aagacgatca tggcggagtt gacagcggac ggctgggaat 300  
gtacgggtggt gatggagtgc tggcaactgtt 330

<210> 18751  
<211> 403  
<212> DNA

<213> Glycine max

<213> unsure at all n locations

<400> 18751

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gttcaatttc gagcatctgg atatattatg cgcctgaatc gaaccttcga 60  
cagagcttt cgttgctcga tctctctctc cgttgctcga tctctctctc 140  
cagagtgana agtaatgacc atttgctctg ctcaaaaagt tctctctcga aatttcgagc 300  
cgttgctcga tctctctctc cgttgctcga tctctctctc cgttgctcga 360  
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<210> 18752

<211> 443

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 18752

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atcttacttt gtaacttaagt tatgaattcc cttaaagaca atcttcttaa atattaattc 180  
aaatgaagca acttgaatat gaatataaag caataataaa taaaggagat taagggaaga 240  
gaaaatgcaa actcagtttt atactgggtc ggccacaccc ttgtgectac gtccagtcce 300  
caagcaaccc gcttgagagt tccactaact tgtaaattcc ttttacaagt tctaaacaca 360  
caaggacaac ccttcctttg tgtttagaga ttctttacaa caagagactc acagtctctt 420  
aatcccttag agaatgagaa gaa 443

<210> 18753

<211> 306

<212> DNA

<213> Glycine max

<400> 18753

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taagcgcttg aatgccatgc tatacaggct gaactatgac tcacagattc aagaaatcaa 120  
 tgaatctctg ctgaccattg aactgtgagt gaacgagctt aaaagcaaat gaactcttgt 160  
 gaagcttcta gaagcaatgc ttaatgcagg aatcgaaatg aatgcacgaa ctgcaagagg 240  
 caaaatcaaa cctctctctc aatctctctc tcaaaatcaaa cctctctctc tcaaaatcaaa 300

<210> 18754  
 <211> 444  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18754

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 atatatcgag acgctcgaac ttacaaacg aagctcgtag caaatatgaa cgacaatgac 120  
 attccactcg gaagtcctat tgagtcctgt aatatatcga gagctcgaat atttanaatc 180  
 gaagctcgta gaatatacga acaacaataa cttttcactc agaagtcgga ttgagtcctg 240  
 taatatatcg agacactcaa taattanaac ccaagctctc agataacttc aacgacaata 300  
 actnttcact cggaagtnct attgagtcct gtaatatatc gagacgctcg aatgtanaa 360  
 ccgaagcccg tagcacattc gaacgacaat aacattccac tcggaagtct gattgagtc 420  
 c 421

<210> 18755  
 <211> 444  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18755

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 aatgttattg tggttataat ttgcagagag cttcgggttt aaatttcgag cgtctcgata 120  
 tattacggga ctcaatcgga cttcggaggg aaaagttatt gtcgtagaa ttatctgaga 180  
 gttcgggttt taaatttga ggtctcgat atattacggg actcaatagg acttcgaggt 240  
 taaatttat tttcttcaa atttctcaa agcttcgggt taaaaatcg aggtcaga 300

tatattacgg gactcaatca gacttccgag tgaatgtta ttgtcggtcg aatntgetac 360  
gagcttcggg tttaaatata gagcgtctcg atatattacg ggactcaatc ggacttccga 420  
gtgaaatggt attgtcgctc gaat 444

<400> 18757

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taaaaagtta tggccgtaag tatcggtctc gagcttctac tatcaatttc tagcgtctcg 120  
atctgttacg ggactcaatc atacatccga gtaaaaagtt atggtcggtt gcattggctg 180  
agagcttcaa ctttcaatat caagcgtctc gatatgttac gggactcaat cagacatccg 240  
agtaacaagt atggccgttc gtattggctc acagcttcaa ctttcaattt caagcgtctc 300  
gatatgtta 309

<210> 18757  
<211> 465  
<212> DNA  
<213> Glycine max

<400> 18757

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cttgcacttg aaaagatatg accatttgaa cttctcgaga gcttgcgttg ctcaatatcg 180  
agcgtcttaa tatattatgc gctgaatcg gactttcgtg tgtcaagtcg tgactatttg 240  
aatttcttga gagcttgctg tgttcaatat cgagcgtctc ggtatattat gcgctggaat 300  
tggactgtca tatgacaaga ttgaccatt tgaatatctc gagagcttcc gtgaccgttc 360  
caggtttaaa taagaagaat caccggacga cgcgacatga acattgtcta gtagacatcg 420  
ttcaaatatt atcggcggat tgaatatata aaacaatacc ggaca 465

<210> 18758  
<211> 470  
<212> DNA

<213> Glycine max

<400> 18758

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tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt 180  
tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt 240  
atctatcaaa catgctattt tactctattt gataaacctg aacagctctg ttttaagtc 300  
taaataattt taagacattt ttttttgtaa cagtgaagcg aatgtgaaca ttatccacgt 360  
gaactttttt aagatcttat tgaataaaat tgatttaatt agattccgca ttgtatatat 420  
gtttctttca tatatatgta tgttggagta caatgtgtga gagacatctt 470

<213> 18759  
12

<223> unsure  
<400> 18759

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ttgttaaggt tta tttttttttt ttt ttgagthgata gggtttcaac 120  
tttttgat gcaatctctt tttttttttt tttttttttt tttttttttt 180  
gcccagaggt taagaggat tgggctatag ttgctaaaga aggcctctatg g 240  
acctca agattttctga gccatgggt caaggttggg tccaattatc ttgtacata 300  
tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt 352

<210> 18760  
<211> 418  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18760

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tacatgctca gctctacca tcattgcca acggaaatta gaagaccgag ccattgcaatt 180  
 cctatgagga ttaaaccgagc agtacaacaa tgtgagatct cactgtgttg ccattggaacc 240  
 catgcccacc ataccaaaga ccttctcttg tglagccaa caagaacgtc agctatcaat 300  
 tctcttcaa atctcaatct tgaatcatala gaaaacgtt ccattaatgc cgtcagaat 360  
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<211> 18761  
 <211> 445  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18761

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 gaaatatttt tcccagtgat gcaagatgat taactatatt agtaaattct ttttgcatat 180  
 cttgcatggc ctcattatga ttcattctaa acagtccata ttcattgttg agagtgttta 240  
 ttctagatct cttaacatca gttgtgcctt catggggttac ttgtaatgta tcccatattt 300  
 cttttgcatt tttacaattt gagactccaa aatacttctc cattcttctc taagtttttc 360  
 tatcagtcca tctccacta ccattgcagg aatgaaggga ccaatgtcaa tggtttccca 420  
 tatatntaaa tctatggctt ctata 445

<210> 18762  
 <211> 432  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18762

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 gtgggacatt cagctttgat ggtccaaaag ccttcacacc cactggcatt aattctcttg 180  
 ctgtgacttg gctttctcct tgaactcttc tggatctcac tgcctttctc gatgtcagaa 240  
 gggatgttcc agacatgggg tttctctctt ctgtccattc tcttctctac ttgtttgaa 300



tgtnttccaa ggagcacaac tgcattagtc agaccttcac cagtttccag gtcataactca 360  
 tttttttctc ttccatcatt ggacacgaaa gccaaattct tgcctttctt ttcagcccta 420  
 tccgagagtc ct 480

<223> unsure at all n locations  
 <400> 18763

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 ctagecagtga tgatatgatt tttataagat aactaaaatgt ttactttctc caaaattgag 120  
 ggtgttggtt gggttgtaga aatcttcata ttgatgtta tgcctttacc ctttatctca 180  
 atgttgattg ttttttcatt gctcaccag acaagatcta agaggttctt ggdaattcga 240  
 caattgaggg agcataataa agagtatgac atgaagacaa caatatattt gggttaaagaa 300  
 acaactaaaa ccaagtttgt agaaatagta gacgcccatt tctgctcaa cattgacctt 360  
 aaatataacg atcaacaatt aagagcaaca gtgagttctc tgcatactgc ttgattatgg 420  
 tatatgcagt tacattgaan acgtgaggt 480

<210> 13764  
 <211> 445  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 13764

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 ggggtatgtg tgggttagtt actcaaggga cttgaaattc aagctccaaa aactaaccca 180  
 aggaacaag ggggttgagg agtatctcaa ggaaatggat gtgctcatca tccaagcaaa 240  
 tattgaagaa gatgaggagg taactatggc tgcatttctt aatdgttga ctaattgatat 300  
 ccttgatata gttgagctgc aggagtttgt tgaatggat catttgcctc acatagcaat 360  
 ccaagtggag caacaaataa taaggcaagg actagtcgc aagagaggt ttacccaatt 420

tggtttctctt agttggaaag acaaa

445

<210> 18765  
<211> 374  
<212> DNA  
<213> Glycine max

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actgaagaag aaaggatgag aagaggggaat gactgggttc ctagaacaaa tccgaattga 120  
tugtattaan actcaacatt tcttgcatat aaaggaaaga atgatcccca tgcctacttg 180  
gagaggggaga tgaaaataga gcattgtttc tcatgcaaca actatgagga ggaccataag 240  
gtgaagcttg cggccacgga gttttcgact atgctcttgc gtgggtggaac aagctacaaa 300  
aggagagagc aagatatgaa gagcccatgg ttgatacatg gactgagatg ataaagatca 360  
tgatgaagcg gtat 374

<310> 18766  
<311> 412  
<312> DNA  
<313> Glycine max

<400> 18766  
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atttctcgga gaaattggga ggagccagat tgaactattg cacttatgac aaagagttct 180  
atgccattgt gagagctctt gatcattgga atcattattt gogttctaat cactttatat 240  
tgcattcaga tcatgagtc tgaagtata tcaatgggca gcagaagttg agtccaaggc 300  
atgctaaatg ggttgaattt cttcaattt ttaattttct tcaaaaatac aaggatggta 360  
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<410> 18767  
<411> 417  
<412> DNA  
<413> Glycine max

<410> 18767



335

<C10>	18771
<C11>	376
<C12>	DNA
<C13>	Glycine max

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cacttatctt tgtacatatt agagtaagat ttcattatctt ttggatcttg tatttatggc	180
tccataaatgt aggtagggtta cctagaaaat gtaagatttt tcaaccattg tattttatga	240
caactagaat agtatcttga ttatgggtag ttctgtaatt tccatgcat taagtgaata	300
tatgatggtg gtgttcgcga atacaattaa ttgaatcngg tgaagcccaa tccaattaaa	360
ttttataggg ggaat	375

440 16-12



cattgggttta taaacttatt gagctagctt tgatattgcc ggtgtcgaca gcacccgttg 240

aaagagcttt ttacgaatg aagattatca agtctaaatt ggcgaataag atcaacgatg 300

tgtgtttcaa tgaattgctg gtaatttaca cggagcggga gatattcaa; tctctggctg 360

gctctctctg

<211> Ghr

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 18775

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aatcagtatt tccaaagctc taaaatttgt gattgcaata ttaattttta atgctctttt 180

tcagggaat atcagcatgg tatgagaatc gtcattgggt taacacttta tgcaagacag 240

tgatggagca agacttgtct tggaatgcc ctgcacttga ttatctggag ccttaccatg 300

ctgcaogtaa gtcagcatga gatttaatag acatgaatta agtttcaatc tctttgtaca 360

cattnttgtg gtaagcttca gtttgaacac acctgattgc atctggtgaa tccctcaaaa 420

agataacaac tacgaggtga anagccataa aagatgatga gcttc 465

<210> 18776

<211> 423

<212> DNA

<213> Glycine max

<400> 18776

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atgattaaaa gtgatatcca taccacata tatgtaggaa gcactctggg atggttctat 180

tgcaaatgta aagaatattc ctatgcttcc aagggtgctc aatatatgcc tttaaggat 240

gttgcttcat gaattgcaat tatctctggg ttgtccaggg tggggttga acatgaggt 300

ctggagtctt tccaggaat gatgaaagaa cgggtgttgc caattccca tacttaactg 360

tcagccttga aagctcgtgc agaaactggaa gctccaattc atggaaaacgt aattcattcc 420  
tac 423

<210> 18777

<211> 278  
<212> DNA  
<213> Glycine max

<400> 18778  
18779

aactgaaaat tctttatcar aattacatat ttataatact taacagatga taagtaatat 60  
taatcatatt tttttcattt gtaaaaaatt aaactcacat attaaaagat ttacaatttt 120  
baaatacagt gtccaattaa taaagttaaa cccgttaatg ataattaagt gtagatagaa 180  
tgatttcata tttttattct gtcaaaaagt ttttattgaa tataaaaaatt ataacataag 240  
gattatgttt caaacaactt tttttctttt taagatgttt tcaactttt ttactagtta 300  
aaaatgatnt tattnttttt atncaaacaa aattaatgaa ctcaagccac tttttacaaa 360  
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actaatatta aatatttaat t 441

<210> 18778  
<211> 278  
<212> DNA  
<213> Glycine max

<400> 18778

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cttatgaaga tgaaacagcc tatatgagac ttgttggcag acttttatat ttaactacaa 180  
ccaggcctaa cattgcttcc attgttcagc aacttagtca attcattctc cagacattac 240  
aagttcatca ctcagcagca attatagtc tcaatata 278

<210> 18779  
<211> 307  
<212> DNA  
<213> Glycine max

<400> 18779





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 gtcacacagt ttcacgatt agggatcata tacatcagta taatcatacc taataatcaa 420  
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<210> 18782  
 <211> 482  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18792

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 agtggccgga agtgcaacaa tagaaaaacc tagagcagat tggactgagg aagaaagaag 240  
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 acatgaagga acaacaaatg ttaaaagatc taggataaac acattaacte gtgaatatga 420  
 actggttagg atgaatgtaa atgaaagtat acaagacatg caaaagaagt tcacacacat 480  
 ag 482

<210> 18733  
 <211> 323  
 <212> DNA  
 <213> Glycine max

<400> 18733

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 ctctgaacag caatgaacct caatatgata ttgttaactt taacagagcaa cctgaggatc 120  
 taaaaggttg ttcctttgtt ccccatcagc ttgaggaact gaacttgttg cgttaaatgt 180  
 cgtataagtc caaaaatgtc atacttctg atgagaaggc ccttggaataa acaagatctg 240

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 tggtaaccact ttctaccatg cctaattg 328

<210> 18784

<211> unsure at all n locations  
 <400> 18784

actaagctta agaaatatgg cctcatcaaa ctacttgitt cccgagggaa attttataaa 60  
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 tatagaggca atagatttaa atatttggga agccatagaa caaggacctt atgttccctc 180  
 tatagtggcc ggaagtgcac caatagaaaa acctagagca gattggactg aggaagatag 240  
 aagattagta caatataatt taaaggccaa aaatattatt acatctggcc tangaataga 300  
 tgaatacttt anggtttcaa attgtanaag tjttaaggat atgtgggata caatacaagt 360  
 aacacatgaa ggcacaacag atgttaaaag atctangata aacactntaa ctctgaata 420  
 tgaactgttt angatgaatg taaatgaaag tatac 455

<210> 18785  
 <211> 408  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18785

tcaagctagc atgattanga ttgtccccc tacaccagca gtgggggtta cctttacaga 60  
 aatatgatca ccactctgaa tctctagcag tctttacac ttatcttcat aaggattatg 120  
 tgtactatgt gaagtcttta tgcctatctt aatcaactta atctctctct cggtttggtg 180  
 caagaatctt ggggccccac gaccatattt gcaccatctt ggttaacaaca aaggggtggt 240  
 ctacacctcc taccatataa agtttcaaat ggtgtcatgc caatgctaga atgaaagctg 300  
 ctgttgtatg tgaattccac caaagggcaa acctgactct atctacctag atgacctcac 360  
 acacatgctg gcaaatattg tctaatgaat atctctctct ctctgatt 408

<210> 18786

<311> 450  
 <312> DNA  
 <313> Glycine max

<323> unsure at all n locations  
 <400> 18786

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 ttatcttacc acaatcagag atcaataata gactttgaaa aacaagcatt ataaacatct 240  
 taattacaac catcaagcac aatcacaagt acaaatatac taccacaatc aataatcctc 300  
 aatcctatac caaagaatat cattaagcgc caatgtacaa ccattatgat tgcacaaaca 360  
 caaacaaaga taatcattga caatcattca atcattatga ccacaaaaac acaaacacaa 420  
 ccataaaaaa agaanatata aattaacaat 480

<310> 18737  
 <311> 497  
 <312> DNA  
 <313> Glycine max

<323> unsure at all n locations  
 <400> 18737

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 tacagtggcc aaggatgctt gggagatcct gaaaaccact catgaaggaa cctccaaagt 120  
 gaagatgtcc agattgcaac tattggccac aaaattcgaa aatctgaaga tgaaggagga 180  
 agaatgtatt catgaattcc acatgaacat tcttgaaatt gccaatgctt gcaatgctt 240  
 gggagagagg atgacagatg anaagctggt gcgaaagatc ctacagatcct tgctaagag 300  
 atttgacatg anagtcactg caatagagga ggcccaagac atttgcaaca tgagagtaga 360  
 tgaactcatt ggttccttcc aaacctttga gctangactc tcggata 420

<310> 18738  
 <311> 471  
 <312> DNA  
 <313> Glycine max

<323> unsure at all n locations  
 <400> 18738

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 gcttgaatcg gacctccgag ttaaaaagta ttaaccattg aaattccoga gagcttccgt 180  
 gcttgaatcg gacctccgag ttaaaaagta ttaaccattg aaattccoga gagcttccgt 240  
 gcttgaatcg gacctccgag ttaaaaagta ttaaccattg aaattccoga gagcttccgt 300  
 gcttgaatcg gacctccgag ttaaaaagta ttaaccattg aaattccoga gagcttccgt 360  
 gcttgaatcg gacctccgag ttaaaaagta ttaaccattg aaattccoga gagcttccgt 420  
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<210> 18739  
 <211> 433  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18739

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 caagaaatta aaatggcat aacttgctac atggaagttc gattcagatg cataactatat 180  
 ggagacgctc gaaattgaac aacgaaagct ccgagaaaat tctaattggtc ataacttgct 240  
 acacggaagt ccgattcacg cgcataactat atcgagacta tcgaaataga acaacggaag 300  
 ctctcgagaa attcaaattg tcataactta tcacacggaa gtccgattca ggccgataat 360  
 atctcgagac ggtcgaaatt gaacaacana tgctctcaag aaatagaaat ggtcataact 420  
 tgtcacacgg aag 483

<210> 18790  
 <211> 484  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18790

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gaatcagaact tncgtttgaa aagttatgac catnttaatt tctcgagagc tccattggt 180  
 caatttcgag cgtctcggta tattatgcgc ctgaatcaga cttncgtatg aaaagttatg 240  
 accattttaa tttctcgaga gcttncatth gttaatthca agcttctcga tatattatgc 300  
 tatgaccatt tgaatntctc gagagcttcc gtgggtcaat tccaagcttc tggatatatt 480  
 atgc 484

<210> 18791  
 <211> 406  
 <212> DNA  
 <213> Glycine max

<400> 18791  
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 tagtgcccaa cttgtctcac aaagtctcc aaaaatgcaa atcatcaagc ctaggtatag 180  
 gatgcttata tttaatggtg atgttattaa gggctctaca atcagaacac atgcgcctatg 240  
 tcccatcctt tttagggacc aaaatcactg ggacagcaca aggactcata ctatctctta 300  
 cccaaacctt gctaatgagt tcatccactt gtctttgaat ctctttggtt tcttgtgaat 360  
 tactttata ggctggccta ttgggcaaag aagctctcgg aatgag 406

<210> 18792  
 <211> 411  
 <212> DNA  
 <213> Glycine max

<400> 18792  
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 aaaatatata acgacttata aactagatgc atttatcata aaacatcgct atgtaccatg 120  
 ttatatctta tataaagagt attaaaaatg cacaattaac tatttaaac ataaagagtaa 180  
 cgtaaatcag ttaaaaggt gtccacaatt taaaagctga tatatatcag acuaaaacct 240  
 ttgggtgat gtaattggga aatttcattc ataatagttc ttgtctaat gcaatcagt 300

tagattgtaa agcaaaagga aagaaaaaca ttatttataa aaatatataa gagtcaagct 360  
 aaaagacaag tagtgataga tacggaattt tgcaatgaat tacggtataa c 411

aggttcaaga tttatggcct catcaaaacta ctggttccc gaggygaatt ctataaatag 40  
 aatcccatc tttaatggag tgggttaccg ctactcgaaa actcgcargc aaatctttat 120  
 agaggtcaata gatttaataa ttigggyaagc catagaacaa ggaacttatg ttcctctat 180  
 aatagccgga agtgcaacga tagaaaaacc tagagcagat tggactgagc aagaatagaag 240  
 attagtacaa tataatttaa aggccaaaaa tattattaca ctgccttagc gaatagatga 300  
 atacttagg gtttcaaat gtaaaagtgc taaggatatg tgggatacac tacaagtaac 360  
 acatgaaggc acaacagatg ttaaaagatc tatgataaac acc 403

<110> 18794  
 <111> 213  
 <112> DNA  
 <113> Glycine max

<400> 18794  
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 acattatcca gtgtctctat atgtgatgcg ccttaattca acatccgtgt gaaaagttat 120  
 gagcatatgg atatctcaag agcttccgct gaacaatttc gagcctctcg acatattatg 180  
 cccctgaatc ggaatccgt gtgagaagct atg 213

<110> 18795  
 <111> 485  
 <112> DNA  
 <113> Glycine max

<223> unsure at all n locations  
 <400> 18795

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tttagactaa gtttaactga gtttcatctg tagatccctc atgtaagact agactcagct 120  
 caagtagctt actaaagttt agcctaattt agcctaagct tggctcggga tgggtgtagtt 180  
 tttaggaggg gttggcttgc ggtggtggcg gnggacagtt ttgatgatga ggytgaayaa 240  
 tttataggc tttataga ttgagatc tttatggt tttataga tttataga  
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 tttataga tttataga tttataga tttataga tttataga tttataga  
 tgggtgagtc tttgtatga atctcaagca ggcctcccca cagatcccta ctgtgctaac 480  
 taatt 485

<210> 18796  
 <211> 417  
 <212> DNA  
 <213> Glycine max

<400> 18796  
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 tcatttcaaa gcacattgca gaatttcaat gaaaagtgac ttgttattac aaatagaaaa 120  
 gttatatttt gtttaattac aattcaaaaa tattattcat ttttgaaaag taattacaaa 180  
 tatacctttt ttagaagtaa ctcaataaaa cttctcaaaa taatcagaaa tatatttttt 240  
 caattttttt ctcaaaatat caaatgaata cattaaatat ttttaataata atattttctt 300  
 ttccaaatga aaaataactt ttcataaaat ataaattaaa cagacggact tgtaattaga 360  
 gatattgtcc gcctttagtt taagcttcag agtcattaat ttatgttcat tatgttc 417

<210> 18797  
 <211> 315  
 <212> DNA  
 <213> Glycine max

<400> 18797  
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 atcactttgg ttaagacatc attgacagaa tcaagtaat gatcaccctt cacaaggttt 120  
 gttcttgaaa actttttaa acccagggaa agaaaggcca cttaattttt gaacctcaga 180  
 gaaccttgat tctttagtt ctccaaatc taaccttttg caattaaagc aggcacaaac 240

gcttctctaga agatattcatt acttttgggt ttgcacaaat tgggtatccc cagtcaaagt 300  
 cttgattata tcaact 315

<210> 13798  
 <211> 444

<212> DNA

<213> unsure at all n locations  
 13798

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 aattgtactc ccagaagaga ctcatataagg tctcccttaa ggcgcttggc ttgcaaat 120  
 aagcgcttgc aaactctacc agatctcaac attctcaaga cagtctatta cctgttaact 180  
 caagattgat ttttcagaat gttagataagt ttggaggtga catttattat tcagctggta 240  
 ctgglatgag ccatataact cacanagato caacctgttc tctgctctg catgaaat 298

<210> 13799  
 <211> 444  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 13799

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 ttctaatttg tattttatta ttgtgtagac taatttgtac ttaacattga atatccaaat 180  
 ttcataatgt atttagtgta atagacaaaa aggaatcact gaatgcaggt attacgttat 240  
 gcaatggatg tcaactataa tcttagtaag ttccaagaat aattgtgaaa agataattgg 300  
 ttaattcaca catatnntca ttttttgtaa ttgatattat atattattaa cttatgtctt 360  
 attatattat gcagttatttc aatgatgcta gaacattaan accagagaga ttgaaggcac 420  
 ttgcattcta gtgggcaaac tact 444

<210> 13800  
 <211> 408  
 <212> DNA  
 <213> Glycine max





ggataacagc tcaagtagtg agagtaccaa atttgacgtg gagcattcta agatttcaga 300  
 tcatggcagt ggagatgcta ttgatcacac tgattaagca gaaactggag ataataaga 360  
 310

<210> 18804  
 <211> Glycine max

<223> unsure at all n locations  
 <400> 18803

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 tgaaaaaact gcccttgcctg tgtcttccct gaaattttac ttgattgtga atacacctgc 180  
 tagtgggtct gcttcaactc ctgatgtgtg ttgcaatgt catgtcttaa tttctgatag 240  
 acaatttctt attgacttag ttgtctaac tttgagtcag attgatgtta ttcttgggat 300  
 ggaactggta tcttccaatc atgtcttatt aaattgttnt gagaaatctg ttggctttct 360  
 tqagtctggt gtagtgaaa gtgatatgt 389

<210> 18804  
 <211> 454  
 <212> DNA  
 <213> Glycine max

<400> 18804

tatgttgatg ctatttctga cttaaaaata tttagaggtg agtcttccag ttttgaagt 60  
 taaggaattt ttttagaatt atttaattcg agtaataatt tttttgttag aatgaagtat 120  
 caatgtctag ttttaagtta atagtcttag caaatagatt tatttatttt tctcattcac 180  
 aaaatattta attgaagtaa taattgtttt tttagataaa aaattaatat gtgaagttaa 240  
 agcgtattaa tttttgtaat taggtttttt actttgaagt ttttttaatt atgtttaant 300  
 atttacaagc cttacaaata tttacctgat tccctcttag ttttttaag ttagaatgaa 360  
 atttgaatct atattttaag ttaaagttag tagatgaagc aaccaaatac agttattat 420  
 ttaaaaaacta cttctgttat gatttaattat tttt 484

<210> 18805  
 <211> 410  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations

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 ttaastatga cattgagtgc attggagagt attgagatgg attggaaaaca tgatcttatt 180  
 aacacttaat aaaggattaa ttcattcatga ttgatgcaac cctaccccccc aagggcattg 240  
 gatagaagac tccaagaaga ttgngccaga caggcaagag aagggccctag ggtttcttatg 300  
 aacttttaggg tagaatttgg gcccatgggc taagtatgag cccacttato tttgtacata 360  
 ttgattttag atttcattat ttttgggccc tgtattttag gttctataat 410

<210> 18806  
 <211> 441  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18806

nggttaacaa tatcttttat ataataaaa tgttaattaa tatcttanaa atactagtta 60  
 atgaacttaa agttgaaata cggaagataa acaattacaa tgttcatatt ttttatgatt 120  
 tatgcattta atattcttat tcttttaatt ccttaactaa tatctagaag cgctaattaa 180  
 caagaaccat ataagtaaac caatgagtaa ctaacaatcc cgttataaaa aaaaaggtta 240  
 tcatcatgtc ttttttggac taatcatatc atcctatgat ttcattcgac aaataataaa 300  
 gttaaaaatg aattgaaatt aaaatacata ggaccgaaaa ggagttatga gttaatatat 360  
 ttaattaaga cacatatctg ttaacaaaat tgatacagca tgaatgaata atgcgtctca 420  
 gagaacaaaa tcttgatggt t 441

<210> 18807  
 <211> 406  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18807

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agcttgtagc attatgcana ccattantaa cttttagctc gganatccga nggagnnccc   60
aatatataca agaccccaca aatgaataga aaagctctta gaaatagaa caaacataaa   120
cttctctctc cttctctc cttctctc cttctctc cttctctc cttctctc
cttctctc cttctctc cttctctc cttctctc cttctctc cttctctc
aaatctctc agagctctct aatctctctc aatctctctc aatctctctc aatctctctc   180
aactttttac tgggatgttc gattgagctc cgtaatatat ngagaggttc gaaatttata   240
acgggaagctc gtaggaaatt caaacgacaa taactttgaa ctgga               300

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<210> 13303  
 <211> 413  
 <212> DNA  
 <213> Glycine max  
 <400> 13303

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actctttctga ctcctgatgt agatccatgt cttctttgag tattcatcaa ttatggacaa   60
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gtaatcaaga gctcttttga ggggtgtgaat tgcctttatga tattaaatcc tatgttgcta   180
gccatataca cagtgtctgac ataatttcag ttcctccaat ctttgatttc ccaacagttg   240
ctgttttttga agtatcatca tacctctctc agtcatatgt cctagacctc tgtaccacaa   300
ttgagtttag tcaggtatgc ccttattgga tcttgatgga acagttacta taccatcacc   360
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<210> 18309  
 <211> 420  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18309

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aagcctctca ttcttaattg agaggtttac caactactga aaacccgaat gcaaatcttc   120
attaaugcaa tagacttaaa catttgggaa tccatacaac ttadactta ttaccacacc   180

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<210> 18812  
 <211> 460  
 <212> DNA  
 <213> Glycine max

<214> uncertain at all n locations

<215> uncertain at all n locations

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 tatgtcgctt ggggctataa tctacacata aaggcacaac taaaaatcta ttgaggacca 240  
 cgttagagaaa cttaaagccac caataagtgt aaaatgtctc gatcaaagat agcccaccaa 300  
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 tgatataagg agtaacaaat ttgtctagat ataaaaatat 460

<210> 18313  
 <211> 313  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations

<400> 18313

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 ggacaatgga gagagaatgc attccatgcc atttttatgc tagcaagatc ctgaatgatg 180  
 cacaactaaa ttatgcaact actaagaagg agatgttggc cattgtgtat gccttataga 240  
 agatccgagc gcacttaatg ggctccagag tcattatctc tactgatcat gcaccaatca 300  
 tatacctttt cac 313

<210> 18314  
 <211> 387  
 <212> DNA  
 <213> Glycine max

<400> 18314



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 gaataactctg ataaaaatgga acaatggcct caatttagtt aaaggcacia tgtatatgat 420  
 agtttagtca agtcaataac ttgcagcat tacatcttg 480

<210> Glycine max

<211> unsure at all n locations  
 <400> 18817

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 aacaatatca cagaggacac atcaatttca aagtgaagaa gtaacctttt caaccaacaa 180  
 acttcaactag caacaaaaga caaagcacia tctcagcct cagtggacaa tttagaagaa 240  
 attgattggt ccttagaattg ccaagagaga acgttgttct ctacaaatac acaaaagcca 300  
 gaagtggacc ttctggtatc aacacagcta gcccaatcag catcagtaaa ggcaatgagt 360  
 ttgagagagc cctgagcagg anaaaataag ccttgctcgg gagcatattt gagatact 420

<210> 18818  
 <211> 464  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18813

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 agtctgtcaa ttcattgtca tactcttgaa actcaactgag cagtagtgaa aagaattctc 180  
 aagtatctaa aaggtctctt acaccatggc ctaactctca nagctgtctc tccaggaatt 240  
 accattctca taaaggcctt atgtgatgca gattgngctt ctaacctga tgatcacaga 300  
 tctactttag gagctgtctt ttatttttgt cctaacctta tatcttggtg gtctaagaaa 360  
 caacagattg ttccaaggc aagtactgaa gcttagtctc gaaacctatc tcaagctaca 420  
 actgaagtaa tggggaata ttagaattct aacagtatca taaa 484



ttatctttaa	ctctcttga	gagggggaat	caatctccaa	acatatctta	tcaatagcaa	120
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aacgaccccg	aactgggtata	tctgtcatcca	tatttggtac	cagaatactt	ttagcaaacac	240
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gagctttgca	acatcaacta	attccatggc	attcacaata	taaagatctt	ntcttcgcaa	360
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<223>      unsure at all n locations
<400>      18820
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tataaattaa taggggtattg ggattcatga ctaactatca gtattattta ggaacttatt	180
cactctatgg agtgaaaaaa attatgtaaa atgagaagta attatggatg tgtctattat	240
taatataaat aaaatatctt ataaacagaa tccaattaaa ttaaaaaaaaa taaaataaat	300
gcaactttct ttctactctg tacgcgcttc tcacctttta cagcaaaaata gaaaatctaa	360
aatttaattta ggttgaaaagt agtagttctt atthaaattc agtgatatct aaagtgataa	420
agtttaactg togettacct	440

1000

<223> unsure at all n locations  
 <400> 18821

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<223> unsure at all n locations  
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 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
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 <213> Glycine max

<223> unsure at all n locations  
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11  
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<210> 18327  
 <211> 450  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18327

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 ggotgaaaat caccattgaa ggactcact gaagctcaaa gattcagcct ccatagaatc 180  
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 tattccatac tctcatcgat ttggatgtga gtattttata ctgaacacta gatatcaact 360  
 tgcaaaqtct ggtrcanagg tggataaaat aatcttctctt caatgctcna acanactaa 420  
 agcatacaaa g'gtt'aaat caaaaacttt 480

400 > 133.19

Abstract: The purpose of this study was to determine the effect of a 12-week training program on the heart rate (HR) and heart rate reserve (HRR) of sedentary middle-aged men. The subjects were randomly assigned to a control group (CON) and an exercise group (EX). The EX group performed a 12-week training program consisting of three sessions per week. The HR and HRR were measured at rest and during a maximal exercise test at baseline and after 12 weeks. The EX group showed a significant decrease in HR and HRR at rest and during the maximal exercise test compared to the CON group. The results suggest that a 12-week training program can improve the cardiovascular fitness of sedentary middle-aged men.

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 <213> Glycine max  
 <23> unsure at all n locations  
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 <213> Glycine max

<23> unsure at all n locations  
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 aatgggtaag ggtgtgtata gcccatgagg catcaacctc gaattggctc gtaaacaaagc 240  
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<210> 13334  
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 <212> DNA  
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<23> unsure at all n locations  
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tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt 360  
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<213> Glycine max

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aaactatatt ttacacattt tttttttttt tttttttttt tttttttttt 240  
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ggagaagaag ggtttttttt gttttttttt tttttttttt tttttttttt 360  
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gttgagtt 428

<210> 13837  
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<212> DNA  
<213> Glycine max





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<212> DNA  
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 <400> 13340

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 cggaatngat tagcggaagc tctagagaaa ttcacatggt cataactttt cacaaggatg 360  
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<23> unsure at all n locations  
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 ttgagcgata catgaagatc ttacaagggt atacaaagaa tttatatcgt ccagaagcat 360  
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ggctgggggaa atctctaccc catgaagcta gctttggagt ttgagtcbaag cttatctcan 180

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18345

<210> 18345

<211> 444

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 18345

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aagatagaca ctccaaggta ctctccaaga tcttagtcc aagcaatacc cattctctca 180

cttagttgat ccttgacttg agtctccaca tttttggaaa agaaccatca agattctctc 240

aagctaattt tctgcttaga actcttgcaa aataaattca aaatattctt gatagaatgg 300

acctgctcca cttaaagcctt cataaataaa ataaggctgt atgcaaaggc taagttagat 360

ataagtggac catgtctaaa aagaacgaata gggcaccaca ctctntggtc cacaacaaca 420

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<211> 426

<212> DNA

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<223> unsure at all n locations

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cctcagaatg gccatccaat agcatttttt tccaaagaaac ttgcacctag agtgcaaaaag 240

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taatttcttg gacacaaatt taattacaaa actgacacaa attactcaga tgaatgctt 360

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<234> unsure at all n locations

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 ttcttgtgaa tgggagtcac actcacgagt ccaaaaaaga gacgggctcg gtggtttgta 360  
 cgaatgccat 370

<210> 18855  
 <211> 324  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18855

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 ttttttttca attagagcct tcaattgctc atgcaacctc ttacataact cagctctagc 180  
 ctggtcctcc ttatgcttaa acatancat gtttaggcata ggaacacaaat caagaggagt 240  
 caaaggatta aatccatata ctatctcaaa ttgtgaacaa ttagatgngc tatggacagc 300  
 ccgattatna ggcacactca catc 324



<310> 18856  
 <311> 419  
 <312> DNA  
 <313> Glycine max

<323> unsure at all n locations  
 <400> 18856

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 ggggagagagc ggggagagagc ggggagagagc ggggagagagc ggggagagagc 11  
 tcttcagagc tataccagtg cagcgcgagc ccacgcacaaa ggttgggta agatagcga 17  
 gattccacca agtatacaaa tggaaaccaa ccatacatgc cccccaatta tatcttccaa 240  
 atcgacacaa caacaattcc acccttttcc cccaaaaggt gattttaata aatatccaaa 300  
 tataatactc ggactaatgg tcacattggc tatttttctt acatctccgc ccccccggagc 360  
 ccacgtatca tatatnacct ccaaatatag agcttgaat actagatgaa aagcaccta 419

<310> 18857  
 <311> 411  
 <312> DNA  
 <313> Glycine max

<400> 18857  
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 attggttagtg gctgtggggtta ccattatttg aacaaccaca tgcaaatttt tatagagaga 120  
 attctttcttc ttctttcttc ttctcttatt catgagattg attaacggat cgagggtttc 180  
 ttaagttgaa ggaattctga acacaaggga agggttggtc ctatgtgggt cagactttgt 240  
 aaaaugcatt ttacaagata gtgaacatct caaacggggt gtttggagat tagacgtacg 300  
 cacagggcat gaccgaacta gtataataac tgagtttgca ttctctcttc ccttaaaatt 360  
 ccttactta ttggtcttta tcttttgcac tacagaaggt tactttgaat t 411

<310> 18858  
 <311> 411  
 <312> DNA  
 <313> Glycine max

<323> unsure at all n locations  
 <400> 18858

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ggaagctctt totgaattag gaatcaagat actaagagat cgtctttaag gtatcctaag 120  
 gttttcacia gagagttata tggataaggt cctaaataga ttogacatga aagatagtaa 180  
 accagagat acctctatag cttaagctta taaatttatt cttaagcaat gtcccaataa 240  
 tttgagtaat tcttgaatgc aactttttaa ttaagcttaa cttgtatgtg 300

<210> 18359  
 <211> 410  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18359

tgagactttt attactatat ttccacttc ttatctaacc ttggaaaggc tccacaaaga 60  
 gaaagccaat attagaaata tgtttatttc tgatgaatgg atcctaaaca agttatctaa 120  
 ggagcctaag gggaaagaag ttgcaaaggt agtgcctatg ccttcttttt ggaatagtgt 180  
 ggtttacact cttaaagtca tggctccact tgtcaaagtg attctttcttg tggatggtga 240  
 aaggaaaacca gccatgggct atatttatga agcaatggac aaggaaaaag aaacaattat 300  
 caagtctttc aacgacaatg aaagcaagta caaagatgtg tttgcaatca ttgataaana 360  
 gatggaattg tcagcttcat aggccattgc atgcacttac ccacttctta 410

<210> 18860  
 <211> 417  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18860

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 atatategag acgtctgaaa ttgaacaatg gaagctcttg agcaattcaa atggctcaaa 120  
 cttttaactc agatgtctga ttccaggcga taatatatcg agacgtctta nattgaacaa 180  
 cugaactctt caagtaattc aaagctcat aacttttca cttggaggtcc gatccatgag 240  
 cataatatat caagtccctc gaaattgaac aacgcaagct ctgagagaaat tccaatggcc 300



<I10> 18863  
 <I11> 440  
 <I12> DNA  
 <I13> Glycine max

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 ttaagttaaga ctatttggta tttctatatta tttctatgtaa acttccattag taaaaagtta 180  
 taatcaaaaag atattgggtat gtatgtttgt atagaacaat tgaaggtgtt tttttctttt 240  
 ttgaaaaaat atagagaaga ttgatttgaa aatgctataa tttctgctaa agaaattggt 300  
 ttgaaatag atatagaacc taagcttttt gaaaaatgtg ttattcatag aaagaaaaac 360  
 atttgatga gaatattgat aataaagtgt taaaattgct taaagaatca ttanaattg 420  
 attacttctt gtatataata 440

<I10> 19864  
 <I11> 415  
 <I12> DNA  
 <I13> Glycine max  
 <I23> unsure at all n locations  
 <400> 19864

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 ttaactaggg ccttctgctt tttcttaata aatgaaagaa caaccactga atggtgaatt 120  
 gcttctcaac taattgggtat aaccaacaaa agaaatacat atcgggtaaa gactttcttg 180  
 taactacatt tttctacaaa ttgcatctt catagcctgt gattgctgct tcatgtgttg 240  
 tttctctgta ctttaattca gcttcaaaag atccatttag atacttagt gtccacttca 300  
 cagcttccca atgtgcactg ccaagatctt ccaigaatct gcttataata cttacagcat 360  
 cagcttaagt aggtctgctg caaaccttct catacattat gcttgcacaa cact 415

<I10> 19865  
 <I11> 413  
 <I12> DNA  
 <I13> Glycine max

<L23> unsure at all n locations  
 <L400> 18865

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 tttttttt tttttttt tttttttt tttttttt tttttttt tttttttt  
 tttttttt tttttttt tttttttt tttttttt tttttttt tttttttt  
 tttttttt tttttttt tttttttt tttttttt tttttttt tttttttt 120  
 tttttttt tttttttt tttttttt tttttttt tttttttt tttttttt  
 tttttttt tttttttt tttttttt tttttttt tttttttt tttttttt 180  
 tttttttt tttttttt tttttttt tttttttt tttttttt tttttttt  
 tttttttt tttttttt tttttttt tttttttt tttttttt tttttttt 240  
 tttttttt tttttttt tttttttt tttttttt tttttttt tttttttt  
 tttttttt tttttttt tttttttt tttttttt tttttttt tttttttt 300  
 tttttttt tttttttt tttttttt tttttttt tttttttt tttttttt  
 tttttttt tttttttt tttttttt tttttttt tttttttt tttttttt 360  
 tttttttt tttttttt tttttttt tttttttt tttttttt tttttttt 413

<L10> 18866  
 <L11> 409  
 <L12> DNA  
 <L13> Glycine max

<L23> unsure at all n locations  
 <L400> 18866

agcttctaca ttaaatcca agcttttcca tatattacgg gactcaatcg gacatccgag 60  
 taaaaagtta ttggagtttg aatttgetca gggettcggg attccatttc gagcgtctcg 120  
 atatattacg ggactcaatc ggacatcaga gtaaaaagtt attggtggtt gaaattgctc 180  
 agagcttcggg tattccattt cgagcatctc gatataattac gggactcaat cagacatccg 240  
 agtaaaaagt tattgtagtt tcaatttgct canggettcg gtattccatt tcgagcgtct 300  
 cgtatgtatta cgggaactca tcagacatcc gagtaanaag ttattgtcgt ttgaatttgc 360  
 tcagagcttc tacatttcatt ntogagcttn tcgatataatt acgggactc 409

<L10> 18867  
 <L11> 485  
 <L12> DNA  
 <L13> Glycine max

<L23> unsure at all n locations  
 <L400> 18867

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 gctcgaaatt caataccgaa gccttgacaa aattcaaaac acaataactt ttactcggaa 120

tctctgattg agtcccgtaa tatatcgaaa agctcgaaatg tgaatgtaga agctctgagc 180  
 aaattcaaac gacaataact ttttactcgg atgtctgatt gagtcccgta atatatcgag 240  
 atgtcgaaa tgggaataccg aagctctgag caaattcaaa caataataac ttttactcgg 300  
 tctctgattg agtcccgtaa tatatcgaaa agctcgaaatg tgaatgtaga agctctgagc 360  
 aaattcaaac gacaataact ttttactcgg atgtctgatt gagtcccgta atatatcgag 420  
 atgtcgaaa tgggaataccg aagctctgag caaattcaaa caataataac ttttactcgg 480

<110> 13368  
 <111> 351  
 <112> DNA  
 <113> Glycine max

<400> 13368  
 aactcgcccc gggatctcta agtcagctgc aagctgtttt tttttcttgc taaaaggcta 60  
 tctgtataaa atgttgtata ataattgtct cttttctgtt gtgtaatata ggtcctcgtt 120  
 ccattctctc ttogaacgtt gacctcatat gttgaaatag gtttgccacc aaaaaaggaa 180  
 accattctca acagtagcat gtgcataatg cagaatcaat tttataagga attactgcat 240  
 aaggatctgt acgtcgcgaa tgcacgagga gaaagttaact tttctaaat atagcaatgc 300  
 tactacctaa atgtcgccat caccatatac ttttacagg tgctgaacct g 351

<210> 13369  
 <211> 451  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 13369

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 gaactatata ccagaatgtc attaaaaaaaa aaaaccaata caaaccttct caagactctc 120  
 attaatatgt ctttcataag accttgyaat gtagcagagg cattagttag cctaaatggc 180  
 ataaatagtc atttcataatg tccatgrrga gtctgaaaag ctattttata cctatcttca 240  
 ggtttcaaca aaatctgggtg ataaccagac cttaagttca acctgagaa aaatcagct 300  
 ccaatagct catcaatca tcaatcaact gttggaatac gaaatgtatg attaacgtta 360  
 atagaatcca atgtctatca gtcaatgaa acctctcaag aacctctct tttcttaacc 420

aanataattg gagaagaana tgggctctta c

451

<210> 18870

<211> 431

<212> DNA

<213> Glycine max

cgacaataac ttttgactcg gatgttctat ttgtcccgta gtatctcgag acgctagaaa 80

ttcaaaaacag aagctattag aaaaatcaaa cgacgataac tttttacacg gatgtcccat 120

ttagtcccat aatatactga gacgctcgaa attgaaaaca atagcaacta gcaaatccaa 160

aagacaataa gttttgactc ggatgtccga ttgtgtcccg tagtatatcg agacgctoga 200

attgaaaaca gaaactgtga gcaattccaa acgacaataa ctttataact ggatgtccga 240

ttgagtcgag caatatactg agtcgctcgt aatgaaaaa agaagcttgc aggaaattaa 280

gacgacaata acttttgact cggatgtccg attgtgtccc gtagtatctc gagacgctca 320

naattcaaaa c 431

<210> 18871

<211> 429

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 18871

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ctctcaagga ggggtggtga gtttcattct gctaattgtt cttgcaatga tgttttggtg 120

caaggngtta cttctacaga ggtgtatgaa caagcatcca ctaatcaaat cttacctga 160

cataggtgag gttgcatttg ggctaagagg aagagctatg atctctacat ccatatacat 200

agaattgttt ttagtggcgg ttgagcttct gatattggaa ggggacaatc tagannaatt 240

gtttctctat atgaacttca naattggtag ccttagaatt gaaggtaaaa gtgggtttgt 280

ggtgctagct gccttggtta tactaccaac aacattgggt agaagttngg agctttggct 320

atgtttctc 429





agcttttggtt aatttggttt gacaataact ntatacaagg atgtccgggtt gagtcccgta 60  
 atatatcgag aggcctcaaa tttagatccg aagctctgag aaaaattgaa ttgacaataa 120  
 ctatatacag gcatgtccag ttgagtcccg taatatatcg agacgctgca nattgaaaac 180  
 ctatatacag gcatgtccag ttgagtcccg taatatatcg agacgctgca nattgaaaac 240  
 ctatatacag gcatgtccag ttgagtcccg taatatatcg agacgctgca nattgaaaac 300  
 ctatatacag gcatgtccag ttgagtcccg taatatatcg agacgctgca nattgaaaac 360  
 ctatatacag gcatgtccag ttgagtcccg taatatatcg agacgctgca nattgaaaac 420  
 gtaatttata 430

<210> 13875  
 <211> 403  
 <212> DNA  
 <213> Glycine max  
 <23> unsure at all n locations  
 <400> 13875

caattatgaa aattaatttt tgtgcgagat ttaatgttgt cacatgagct ataattattg 60  
 gataaagtat ataagtatac tactaattac tcatacaaca tctaaattaa taaaaaagat 120  
 tgcagtgctt atataataat tattagaag atatatnaag agattaataa aaagatgtat 180  
 taggttctat tgatagaggt atactaataa aaaaatacaa cgaaattcat tcagcatcgc 240  
 tatttttttt ttaaatttag aagtatgaaa tgaaattaat ctctttctgca ttatacagta 300  
 gaaatatata aaaaataaaa taattatttt atttatgatg gctcattcta gtgtatttca 360  
 attaaagttt ctccattgaa attctcttta ttgattctgg atc 403

<210> 13876  
 <211> 395  
 <212> DNA  
 <213> Glycine max  
 <23> unsure at all n locations  
 <400> 13876

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 acatgatatt ctccatgatu atatcagcc caagacagcc aagaaatgac atgtatgttt 180

atctaagtcg gttgattgaa ggootgagaa agctgtggga cgaggggggtt ctagtgtntg 240  
 atgggtttca gaatgagact ttctaatgc atgcaatgct gttttgtaca attaatgact 300  
 ttccagcata taggaatttg agcagttaca ggtttaaggg tcatcatgca tgcctcatct 360  
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<110> DNA  
 <113> Glycine max

<400> 18877

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 ttaggcttat gctgcgaata tatacaatag acgtctgtca agcgcgagca gcagaattcta 120  
 ccacagcaga acagtgttga cctctgcaga aacagatata gccctgcctg gaggaattac 180  
 gctaacctca tatggtccag ccttagcaa caacgacaac agcctgtctc ttaattcaca 240  
 aatgtgtgtg gccagacat accatacatt cctccaccaa tccaaacaac gcagcaaaccc 300  
 cagaaacaac caacag 316

<110> 18878  
 <111> 379  
 <112> DNA  
 <113> Glycine max

<223> unsure at all n locations  
 <400> 18878

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 caagtcagca agcattgcta ttcttatcaa tggcagtcct acaaaggaat ttgtctctac 180  
 tanaigtctg aggcgaagtg atccttttag ccccttaact totaatatag ttggagaagg 240  
 cctcicatga ttgatgaagg aagcagtcac aagaacttat atagaagcta tatggcttga 300  
 aagaiaaagc aaccatttaa tatcttgcag tatggggatg acagcaattt tgtgggtgag 360  
 gctgigtggg agaattgta 379

<110> 18879  
 <111> 434

<212> DNA  
 <213> Glycine max  
 <400> 18379  
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 ttttgaacat ttttgaacat ttttgaacat ttttgaacat ttttgaacat ttttgaacat 420  
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<210> 18380  
 <211> 456  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 18380  
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 acacagtcgn cagcanagag taagtatcag atgatagggt caccctata gatntaatg 120  
 ccataagtat gtccctgccc ctccaacttc ttaataagag cttnatccc ttcagaacaa 180  
 aggatgaaca aaaaatgaga gatgggatct cctagtctga gaactttccc ctggataata 240  
 ggaacaaaca agcttccatt gataataaca gagtagacag attgggatgag aattaaaatc 300  
 caacthaacc aagtcgcact aaatctcatt ttggccatga cgttttttaa ataattccca 360  
 tgaacttggt catacgttct gtgatatcc atcttcagcg caacttgtaa cctccacat 420  
 gtaaccttg aacttaract gcatatgat gagaat 456

<210> 18381  
 <211> 409  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 18381

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 ctatctatgg taactggacac aaatttcaca gactctttca aaacacaaaag gtaattatct 180  
 ctctctctct ctctctctct ctctctctct ctctctctct ctctctctct ctctctctct 240  
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 gaattctaaa cacaaaggaa gggttgctct tgtgtgtcta gaacttgta 409

<210> 18832  
 <211> 366  
 <212> DNA  
 <213> Glycine max

acccttgtaa atgatattct tcatgcctct taagtgcaga agtcacaaac ttctgatgca 60  
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 gtgtccataa gttagcagttg tcccttgatc tgetgcctct cataaaaaat cattctctct 180  
 attggcaca accattctga ctttgtgaag ttacattga atccttcac acccaactga 240  
 ctgatgtgta tcatagttgc agtcagtcac ttaccagca gtactttgtt cagaactagga 300  
 agcatcatg gactagcttc cccattccag agatctgtcc tttagagaca tctccaaatg 360  
 tcaat 366

<210> 18833  
 <211> 408  
 <212> DNA  
 <213> Glycine max

<220> unsure at all n locations  
 <400> 18833

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 ggaatatttc cttctttttg tttagaggaa accacatgg atcaatgcac attaccacaa 120  
 ggtcagtggg agtaaaatar gtttcttctt ttatattga gatgatattt taacttgcaac 180  
 caatgatcaa tgttttctac atgaggtcaa acaattctc tttagaant tgcacatgaa 240

agaatttggg tgatgcctct tatgtcatca gcatttaaga ttcatagaga tagacctoga 300  
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taattgtcag aaagtgttgc tcccatcgag aaggytgata gatttaatt 408

<223> unsure at all n locations  
<400> 18384

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acataactgt cagttactgt cgaggcttct ggagctctca taacttgttc acctatctct 120  
gtgcgacatt tgcgttgata agctgcctca aactctcttc gtctctctgy attccttcag 180  
cagcaaagta gtttatgggt gtcaattgct tggcaactgt acctcgtatc tctacttga 240  
caatctcttc ccttatcgca tgcagagaag cccctctctc aagctcttgc aacaatactt 300  
ttcttgccttc ctcaaatacc atct 324

<210> 18335  
<211> 437  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 18835

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ccagagtaaaa ggggttattgt cgtttgaatt tgttcagacc ttcggtatct catttcagagc 120  
gtctcgatat attacggaac tcagtcagac atccagnta aaagggttatt gtctcttgaa 180  
tttgcctcaga gcttcaacat tcaatttcga ggcctccgat atattacggg actcaatcag 240  
acatccaagt aaaaatttat agtcgtttga atttgcctcag agcttcggta ttccatttcg 300  
agcctcctga tatattacag gactcaatca gacatccgag taaaaaatta ttgtcgttcg 360  
aatttgcctc gagctcaac attcaatttc gagcgtttcg atattattac ggaactcaatc 420  
aaacatacga gtaaaaa 480

<210> 18336

<211> 404  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 13336

atggaagaa gaaagattt attcattca gacttggat ccaactatc tcttatgcc 12  
 atatcagcta gatcttgacg ggtattcaag ccactcttcg tcttgccctg aatgtraagg 240  
 aaggtcccaa tcacactgtc acaaacattt ttcttcacat gcataacatc aatacaatgt 300  
 ctaangtcaa gattcaccca gtacggaaga tcaaagaaaa tggacctgtt ctcccatatg 360  
 caactctgac tttatccctt cttttgggtc ttcccaaata cagt 404

<210> 13337  
 <211> 336  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 13337

agcttaacta tatgtatgag aagtgggtgg aattcctaga gcaattccct tatgttatca 60  
 aacataaaaa gggaaaaggt aatatngtag ccgatgctct ntctcggcgt catgcattac 120  
 tttcagagaa tggtttcttt agacatgaag gctttctttt caaagaaaaa aaattgtgtg 180  
 tgcctaaatg ttctactaga aatttgcttg tttgtgaagc acatgaagga cggttaatgg 240  
 tgcatttttg ggtccaaaag actctagata cattacaaga accattttat tggcctcata 300  
 tgatnaatga tttgcacaat atttgtgaac attgcattgt atgtaaaaag gcaaagtcta 360  
 aggtaaagcc tcattgattg tatact 386

<210> 13338  
 <211> 473  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 13338

attcagctaa aaagtaactg gatgcgttga tcaacttcat caactatctt gttgtgaat 60

cagaaaatctg taactgtcgc aagggtttgt ggttttgtgt cctctgtctga ccaccataga	180
gabcttngcc ctcccatgca gcaacctgga gtaattgagc aacctgaagc ttatgtctga	190
tatatattaca atadacctca taaactcac gagcaaaaac aaccacacga gagcaattat	240
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agagcataga ttctctcagc tatccaacaa agcaaacaa accagaaaaa gcaaacagtt	400
gagggccctc cacaaacctc ctcgaagaa cttgtgagjc aaatgastat gca	410

nttagtttct	ccccataagt	gootgaaata	tgtgtttctg	atcttacasa	ctaogtgcg	60
tngcttgat	attgocatgc	atatctctat	gatatcatgt	gatgcaatcc	tacccccaa	120
gggtattgga	tagaagactc	caacaagttt	gggccagaga	tgcaagagaa	gaacctaaag	180
ttctcatgag	ccttaatgta	gattttgagc	ccatgggcac	agtatgagcc	cacttatctt	240
tgtacatatt	agattaagat	atcattatct	tggggccttg	tatttatggc	totataatgt	300
aagtaagggt	ccctagaaat	gtacgatctt	tcagcccttg	tattttaagg	caacctatact	360
agtttttgta	ttaagggtac	tcttgtaatt	tcacatgcac	taagtgaata	tgtgatgt	418

gcaagaattg caggtraca tataactgct ccaagtgaag attctctgca gctactatgc	60
tcaaaaataat tctgaaggta gtcattctta caactggaga gaagatctct atgaaatcaa	120
tctcttgctt tctggagaac cctttcacca caagtctctg ctctgatatc cttctaccgt	180
cagattcttt ctta	245

<210> 18891  
 <211> 310  
 <212> DNA  
 <213> Glycine max

tcataaagttt taaatcggaat gtccgaatcca agagcttcaa ataatgaaat gaacgaat 120  
 gaacaatgga agctctagag aaattctaata ggtcataaat ttccacaccc aggtcctatt 180  
 cangcgctta atatatccag acgcctcgaaa ttgaacaatg gaagctctcg agatattcaa 240  
 atgggcatta cttttcacgc ggatgtccga ttcaagcgta tcacatatcc acacgcttgg 300  
 aattgattaa 310

<210> 18892  
 <211> 309  
 <212> DNA  
 <213> Glycine max

<23> unsure at all n locations  
 <400> 18892

agctttcatt gttcaattnc gagcgnncgc angtggtatg cgcctgaate tgacctccgt 60  
 gtgaaaagtt atgaccattt gaattttctcg agagcttccg ttgttcaatt tggagtgtct 120  
 cgatatatta tacgcctgaa tcggacctcc gagtgaacaa ttatgacct ttgaaatgct 180  
 caagagcttc cattgttcaa tatcgagcga ctcgatttat tatgcgccag aatcggacct 240  
 ttaagtgaaa agttatgacc atttgaattt ctcgagagct ctgggtgttc aattttgagc 300  
 ggttgata 309

<210> 18893  
 <211> 394  
 <212> DNA  
 <213> Glycine max

<23> unsure at all n locations  
 <400> 18893

aattacaggt atgtgtaatt gtaataagat ccttagttga taattctatc ataattagga 60  
 tggatgtatc aaagtcttac aatgcttgaa ttggtgtgat aatcttgaat atgcatttca 120



acttactcat ttaactttta taatattgat ccattggtaa ggattgaaat ctttcgaaac 180  
 atgttttggg aaataacttaa gtttttatcc cgcattcanat aattgattat atgatgatat 240  
 aattgattat ctttcattatg atdccccttgt ctttcattatg tttttttttt ttcaaatagg 300

<210> 18894  
 <211> 339  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18894

atatatatta gaggatttgt atataaatat gtaaaaatat ataaaaatca ttatccaaat 60  
 taatatatat tcaaatgatt ntatatcac acatgtcttg cattatgtta atttatgcaa 120  
 acatantttg aaaattatta tctttataag catattcgca ttgcatatg acttttatat 180  
 atatatatat ataattttta taagaaaatt agtaataaaa aatatattac attntgtaat 240  
 tattagttnt atactcctat catcataagg gggaaaagta tactactaaa ataaaacttt 300  
 aaatttattg ggtttatact catatcatca agtgtacta 339

<210> 18895  
 <211> 257  
 <212> DNA  
 <213> Glycine max

<400> 18895

gacatcaacc ggtccataga gtgtaaggag tatccacaag gcgcttctgg caacgacaag 60  
 aggatqttgc agaggttggg aactagtttc tttctaagtg ggggtatcat gatggacctc 120  
 attggaacct tgttgcttg gatctcttc atcaatggaa gtccttgctt cttgaattta 180  
 atggcagcaa atgggaaaag aagaagagtt gagaggagac accacttcaa ggagaagatg 240  
 agtctagaag aagctca 257

<210> 18896  
 <211> 272  
 <212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 18896

aaacagcaga acaattatga cctttccaga aacacataga accctcagtg aacaaatcac 60

atgacacg ccttctgagc cctttctgag cctttctgag cctttctgag cctttctgag

ctgacacg

aaacagcaga acaattatga cctttccaga aacacataga accctcagtg aacaaatcac 120

atgacacg acaatgcagtt tcagcaagag accagagcct acattcagag ctaaaccaat 300

agatggggac aattggctac ccaattgaat caacaacagt cccagaatto tgacaagctg 360

cctttccaag ct 372

<210> 18897

<211> 433

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 18897

tctggtggga catcttgact tgctttccaa tcngacatto tctacagatt ctgccttcnn 60

ctatnntcag aggggggaatg cctctaacag cacctttgtc aatgatttct ttcattgctc 120

ttaaqtgcag atgtccaaat attgatgcc atattttgac ttcattctct ttggagaata 180

gacatgtgga ggagtaactg gtttcttgag gtgtccatag gtaacagttg tcttttgatc 240

tgctgccttt cattaggact tcactcttct catttgctac caagcattct gactnctgta 300

agtttadatt gaatccttca tcacacaact gactgatgct gatcaagttc gcagtcagtc 360

ccttcaccag cagtactttg ttcagactan gaagtccatc atggactagc ttcccatc 420

cagtgatctt tca 433

<210> 18898

<211> 350

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 18898

acattatcta cgttggacct cggctggagt tgaatacgtt aggttgaggt ttgctcatt 60

gectgtcata gggttttntt aaagetoggc tgggtttaca taaaagtctg gctttgacca 120  
 cgagcctatt taaaaacttg cctaaaagagc tctttgatta attaatatt ttaaaaatcta 180  
 tttaaaactt aacttaaaaa aaaaacttat aaaaatttgt ataaagaatg taaaaattca 240

<210> 13899  
 <211> 376  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 13899

agcttttatt gttcaatttc gagtgtctcg atagaggatg cccctgaatc ggacctccga 60  
 atgaaaagtt atgaccattt gaattcttcg agagctacct ttgttcaatn tegtgcgtct 120  
 cgatatatta tgcgcctgaa tgggacctcc gagtgaaaag ttatgacctt ttgaatttct 180  
 cgagagcttc cgatgttcaa tttegagcgt ctgatatac tatgcgactg aatctaacct 240  
 ccgtgtgaaa agttatgacc atttgaattt ctogagagcc tccggtgttc aattttgagc 300  
 ggcctetaact gtgatgcgcc tgaatcagac atccgagtga aaagtatgga ccattgatct 360  
 ctogagagct cccgtg 376

<210> 13900  
 <211> 290  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 13900

agcttttatt atttttgcca gctgcattcan aatgggaaac aactggaggt ttttgagtct 60  
 ttgcctcttg gcattgattg catcaactca tgcctcaactt cagcttgggtt tttatgctaa 120  
 taatcgccca aaagcacagc aaattgcttt gaaatttggt catgaccata tccataatgc 180  
 ttcataacta ccaattgcct taataagaat gcactttcat gactgttttt gtaaggtatg 240  
 tccctcaatc ttaagcttc tgcctttttt acttaacaca tacaatgtta 300





gac

303

<210> 18907

<211> 303

<212> DNA

<213> Glycine max

gagggcuna aacatcaata tctatcactc cctcagtagg tctgcccaga tatttggttaa 60

tcacagcatg ggagaattta acacactntc ctctgacaaa caacttntga tactcatcac 120

tcttctgtt agatatgtca gagggaatgt tgacaatgaa ttccttgact aagccttcat 180

agaaatctcc caacttgctg acagtcttca gcagtcacgc agccttgatg aggtccatga 240

tctccttgca atccaatgca gctctttcca gttctcttcc caagggcagt ctctgttgat 300

. a a

303

<210> 18908

<211> 392

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 18908

tatcttgatg gtcttggaac tcttccatca atgaattcct ttgcttcttg aggtttgatt 60

gcagcgaagt ggagaaggag aaagatgaat ggagatgcc a ttcacagtag aagatgagtc 120

tagaagaagt tcaccaccat aggaagccat ggataagagc ttgaaggtag aagaagatga 180

atgaagggag aggaagagaa gagcatgaaa tttagtgcct cttaagaaga ctgaactttg 240

aagtttaatt ctcatatgat caaagttgaa aaaatgcaca cacaagacct ctatttatag 300

cttaagtgtc acacaaaatt ggagggaaat ttgaatttct attcaaat t cactcgaatn 360

tctggagcca anatatcact aattatgatt ag 392

<210> 18909

<211> 279

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 18909

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caagatglat caggatctca cgacaargtt ttggtgacca aacatgaaga gagaggctag 120  
tggatctgca cctgctgctg tggatctgca cctgctgctg tggatctgca cctgctgctg 180  
tggatctgca cctgctgctg tggatctgca cctgctgctg tggatctgca cctgctgctg 240  
tggatctgca cctgctgctg tggatctgca cctgctgctg tggatctgca cctgctgctg 300  
tggatctgca cctgctgctg tggatctgca cctgctgctg tggatctgca cctgctgctg 360  
tggatctgca cctgctgctg tggatctgca cctgctgctg tggatctgca cctgctgctg 420

<210> 18910

<211> 401

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 18910

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attcatcaca ccccatgaga aattgcatac acttgcgtct tttgttgttt gcttcacatg 120  
tgcaaatagc atcattatag gatcctaact catcccacaa ttttttttta actttgtata 180  
gtatgcagca actatcattt gatettaagt aaggcaagca atctctctct cgatctggaa 240  
aatgagtggt gcyttgcttt gaaagaaaca attttgaaga tcttcccaca ctccatgagc 300  
agtgtaaana aaaataacac tatctgtaat atcaggggtc attgaattaa gaatcccctg 360  
acaaaccata tcattgcatt ntccatgcta catagtcttc t 401

<210> 18911

<211> 419

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 18911

agctntgagc ttattcttcc gacaataact ntggattcgg atgtccgatt gtgtcccgta 60  
ttatatcgag atgtctgtaa ttgaaaatag aagctctgag caaatctaaa cgacaataac 120  
ttttgaactg ggtgtccgat tgtgtccggt agtatatoga gacgtctgaa attgaaaaca 180  
gaagcaatga gcaaatctca acgacaataa ctttttactc ggaagagcga ttgaatcccg 240  
taatatatcg aaagctctct aaatgaaaac aaagctctcg aaacaaatca aaacaaatca 300

aatttttgact cggatgtccg attgagtcac gtaatatata gagacgctcg caattgtaaa 360  
 cagaagctct gagcaaatc acacgacaat taattctctac tgggatgtcc gattgagtc 419

<210> 18912

<211> 154

<212> DNA

<213> Glycine max

tatctctctac gacaatcaac tgggcgypaa aattctccggc tctatcggga accttaagag 60  
 accttaagtg ataagagcag gtggaacaaa gaacctggaa ggcctcttac cacaagaaat 120  
 tggcatttgt tccagtttgg tcatgttggg tcttcttgaa actagctctt caggttctct 180  
 accttcaact ctgggcctct tgaaaaaact tgaaaaccatt gccatttaca ctccctact 240  
 ctcaugtcaa ataccacctg aactctngta ctgcacaagg ctcccaaaaa tatactctta 300  
 cgagaactcc ctcactggat ccataccaag caagtctggg 339

<210> 18913

<211> 154

<212> DNA

<213> Glycine max

<400> 18913

tctgggtggga catcttgact tgccttctaa tctgacatcc attccagatt ctgccttctt 60  
 ctatgttcag attgggaatg cctctagcag caactttgtc gatgatttcc ttcctgcctc 120  
 ttaagtgcag atgtgcaaat ctttgatgac atat 154

<210> 18914

<211> 371

<212> DNA

<213> Glycine max

<213> unsure at all n locations

<400> 18914

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 tccacatctt tgaatttgaa tgttcaagct ctgagacat tccatcgcac ataatcttt 120  
 actcccatgt ctgattgaat ccccaaat atcgaaaagt tccaaatata atgttgaagc 180



tctcagccaa ttcatacgaac aataactttt ttctcggatg tctgattgag tcccgtcata 240  
 tctcagagacg ctcgaaattg aatggtaaag ctctgagcca actcatacga caataacggt 300  
 ttactcggat gtctgattga gtcccgttac ttatcgagac gctccgaatt gaatgttgaa 360

<211> 13915  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18915

agcttgaatt ttatgttgat ttgacagaga gaaatacttg tagcttggtg aagttactag 60  
 aatttgggtgg ttgtctataa gaacttgaca ttgtcttggt ggttgagatg aaccaacata 120  
 aatntgatgt gtcttattct tctctatttg tcttttgcta ttgtatctgt taggttttga 180  
 atttgatctt tattatttaa aaactttggt tgttttataa agatttgaaa ctatcatctt 240  
 atttgttntg caaaagtctg atatctggtt tgttaagtct tacttcacaa gacaataact 300  
 ntattanttt acgaaaaaat tattttttta tgaaaattac aattcaatct tatttcttgt 360  
 aatatttatt ttgcaatat tatttatattg tat 393

<210> 13916  
 <211> 381  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18916

ntagcttcca ctctgaagac catatgccac tagaccagtc tattctagaa tatagaaaat 60  
 aaacttcacg gtctcgaata catgtagcgt gcttaaacctn tgaggtgtaa catcccaaaa 120  
 aaaaactaat aattatctag ataaagatat ttaaatatat cttttattac acgacaagat 180  
 agattaaata atttaaatat atcatataat gattttttatt tcgaacagag gttactataa 240  
 taatataaaa gatttggtaa cgataaatta acgataatag aaagtataga taaagaagga 300  
 tcaatttaaa gatttcaaat tacacacaat tcttaatata tggttgacag tctttctctt 360  
 agaacaatata caataagaaat c 381

[illegible]

400 18918

tatgaagaga gaacaattta gagagtgate gaagactttc aaatggattt ccaactgaatt	60
tattcataga gagatcgaga tatcttaatg atgaaagttt tccaaatgat ctaggaagag	120
caccaccaat tgagtggttg gaaaaaagta acgtgtcaat atttttaaat gccccaatat	180
gatactgtcag attgacctgaa agtcgtgaac tetgaactgc aagtctctgt agtccatggg	240
aaatacaagg agcaagaatt tctaaaagtt cattaacctg ttggttgagt ttgagatatg	300
ataaatctat caccct	316

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$223$      unsure at all n locations
$400$      18919

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- 242 -

tacaaagata agggggctca aacttagccc atgggctcgg aatctaccct tangctcatg 240  
 agaaccctaa ggctttccct tggatctctg gcccaatcta ctgggtgctt attatccaat 300  
 ggcctttctg not related catcattccc tccacattgg aaacatttt 349

<212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18920

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 tatcaattat gacatttcca gcaacagata caacctgga tggaggaatc accctaacct 120  
 cagatggctc agcctttatc aacaacaaca gcagcctgct ccttccttac aaaatgctgc 180  
 tggcccaagg agacatata ttcctccacc aatccaaaca cagcaacaac ccagaaaaca 240  
 accaatagtt ga 252

<210> 13921  
 <211> 380  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 13921

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 aaatcacatt tgggtgtggg ggaatgtgag gctcanagaa cattgtgtat ttccatctc 120  
 tctttgcagt gcatatgata gagcggtctat taaattccga ggagtggagg cggacattaa 180  
 cttcaacatt gaagattatg aagatgaact gaagcangtg atcaatttgt gaatatttat 240  
 attttgtttt atcttatctt gaacagtcac acctcatacg tataggatca ccttatctcc 300  
 tacagttagt gatatttttt ctgtcttgaa gtactctcat gaatttgtha aatgcaangt 360  
 taatagatga gcaatcttac 380

<210> 13922  
 <211> 489  
 <212> DNA  
 <213> Glycine max



ttgttgtgtg taaccttttg caacaagaag agccttgtat ctatcaatgg agccatctgc 300  
 totatacttg accatataaa tccatctgga actgatgggt ctattatcgg gtg 353

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<205> unsure at all n locations  
 <400> 18925

agcttccagt ttattttcat atcttcagct cctagtttat agcttataag ctctcaacta 60  
 acctattaat tagctttacc aaattaaatt tgttagttta taagtcttad ctagtctata 120  
 aatgaaaaaa taaattaagc taaaataaaa tgttcgtctt ttatgtattt ttgtttctta 180  
 ctctgctctt ctaatttagt ctcttataac ttctgggaag ataatagaaa atggaatoga 240  
 ttgaaacata gtagaatggg tgaatcatga atagaaagaa ttaacaatat gtcactctat 300  
 tattaataaa tgtagatgta taatataatg gtcaaaaatt agattccatc atttgataaa 360  
 aggagttgaa taaattatct ttttattcat tatgaaaaat aa 402

<210> 18926  
 <211> 456  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18926

agcttgaagt tatatgttaa aataactnng tgtattcttt ttacattctc ttgcaacagc 60  
 ctndacttga gntttatcat tanannagtg ttccagggaat nntaatccaa acctattaan 120  
 nattgatccc aataanaatt gatnaatoga gcanaattgt tatanaaaaa taactaaaga 180  
 ctccaatgen agttcgggtt tctgattctc atgttcaaaa ttgaactgag tcaaatggga 240  
 aagtaacta aatttatatt agtcttattt tgtctctctt nttaactgca attcctatat 300  
 atttatcttg aaatacaatt taacttattt tgaacttata ttattatttc tgaataaatt 360  
 gaagataatn tgcactnag ttgttgactt agatcaagtt gtgggtttat gacagaatt 420  
 aatagtttga aatgataatt ctgtatctgc attatg 456

26. measure at all n locations

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<L10>      13928      .
<L11>      360
<L12>      DNA
<L13>      Glycine max
```

<123>        unsure at all n locations

12104	13929
12114	364
12124	DNA
12134	Glycine max

400 1999

- 255 -

atgaaaaaatc tgaacacaaat actgtgtaca aaagcttcaa agcctgtgtt gaaaaggaag 180  
 ctgggtatcta aattgtttgt ctaagataag atagaggtgg tgaattcacc tctaaagagt 240  
 atacacaaatc atcactaat caatctatct ctaggcaatt gacggtacc caaacctcctc 300

<210> 18931  
 <211> 402  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18930

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 atgtacaaca tgggttatca atacaaaacc gatgttaact aaatgatgtt aacatttaaca 120  
 tgggttttct acaacaaaacc gatgttaacc tatcttatgt taacatcggt tttcttaana 180  
 atcgatgtta acataactgac tttaacatcg gttattcaaa aaccgatgtt accagtttca 240  
 tgttaacatc gggtttttaa caactgatgt taacataagg taattaacat cgggttttcta 300  
 aaaaaccgat gttacacaaat tcacattaat tacaattatg ccaccatgtt aacgttaaca 360  
 tgggttttga ggaaaaccga tgttaaacgt acgatgttaa at 402

<210> 18931  
 <211> 405  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18931

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 catttagctt caatttcaag aagccccaat caactttatc atagaacttc tgcacaaagtc 120  
 atttttagcc taagattccc ttttttatta tgcattgtgt gggcaatctc ctgagctatt 180  
 atagcattat cagatggatc tctattagga atataaatgc ttgtcaaaagg gccataaaga 240  
 ctatcaaaat gacgtttcaat gccattcaaa aacatttcac agataatttt gacatcgaca 300  
 ttgcataact gatggggcta aactctttta agaaagaagg gccattccact ttgaggatag 360

ttacaataag agtttcaacc aaacttggat tgatggagcc taaag

405

<210> 18932

<211> 283

1

2000000000

<212> 18932

taaatatagg atgatatagg atccacata taactttagtc atgataaatg taatattgga 40

aaaaaggaaa tgtatggaaa ctactangt gccagctatt cttgtgtctc catgggttcc 120

tgcttcacac ttaagcttag cctagtccaa atcaaatatc ttgggggtga gatctttata 180

ccacaacaca ttattggcct tgatgtccct atgaacaatc ttcattgttg actcttcacg 240

aaagttagcc aaactatagc gataccaaca cgaaatctat gct 283

<210> 18933

<211> 238

<212> DNA

<213> Glycine max

<400> 18933

ctctgcaggg aatctaagtg tgaagcatgc tattctgcac acgattgtag ctgccaaactg 60

ugtaaccact aatcatactt ccaactgttg cacaagtctg agtaaatttc tgtatgtctg 120

cggaaccaca tccaaatatt atctggaaac tatatctttg atcaaatgt caaacattca 180

taatcttttag ctatcaaata agccattgcc ttcctactg tattgtgtgc attatgac 238

<210> 18934

<211> 337

<212> DNA

<213> Glycine max

<220> unsure at all n locations

<400> 18934

ttctttgcat ttctctcttc cctttaaact cttctattta ttgctatgta tctcttgctt 60

taaagaagtt aattatgaat tgtcttttga gtaattcact ttaacgggtg attgttaact 120

ccaaaaacaa daad'ataagt ttaattgagg aatagtcttt gtaatttaar tcaaaccttt 180

tctttcttaa cgttaactgaa gccatttgc aacatcttat tcttgacaaac tctctctctt 240



aagaagacca actctcctgc cttgataaat gaagcccat gaacgtctat atttttactt 300  
 gaaaacacag tcatcaaagc tctttctct ttttgaa 337

<210> unsure at all n locations  
 <400> 18936

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 aatatatoga taagctogaa attgaatggt gaacctctga gcaaattcaa acgacaataa 120  
 ctttttactc ggatgtctga ttgagtcccg tcatatateg agacattoga aattgaatgt 180  
 tgaagctctg agcaattca aatgacaata accttactc cggatgtctg attgagtccc 240  
 gtcatatato gagaacctcg aaattgaatg gtgaaacctc gagcgaattc acaccacaaa 300  
 taacttttac tggatgtct gattgagtc catattata 339

<210> 18936  
 <211> 416  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 18936

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 ggoottgatt ntctcaaggt ccacttygac cccatttcta ccaactacaa accttaagaa 120  
 aactatatta totacagaaa aagtacactt ctctatattt gcataagaggg tgttttctct 180  
 aaagactgaa agaacttgcg tgagatgtcc tgagtgtaca totangctcc tactgtacac 240  
 tanaatatca tcaaaataaa caactacaaa totacctatg aaatccctta agacatgatg 300  
 cataagctct ataaaggtgc ttggttgatt agtgagccca aaaggcatca ctagecattc 360  
 atacaaacca aacttggctt tgaagagang tctccactta tccattttt tcatcc 416

<210> 18937  
 <211> 385  
 <212> DNA  
 <213> Glycine max

[illegible]

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..10>      18938
..11>      482
..12>      DNA
..13>      Glycine max

```

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<223>    unsure at all n locations
<400>    18938

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gaaaaattgn gatgttacgg tgtttgtttg acattctttg tcttctagg agtgtatgta	180
ataa'atctt tgtagcacac atgagaccga tgttgtttgg taagagaaaa ataagattct	240
agtaaattta gagagtttga taagcactgt gctacttcaa caaatataaa gatatgtgaa	300
atttggtgaa gggatatctt cctcaaatac ttgtcaatta atataagcat acaaaaatana	360
attaaatata atataaatca taaaatatct tactaattat aagatcaaca ttggataata	420
agag'aagaa cacattatta tttaaacagt tgaaagataa aagtaatat attaaagaac	480
ta	492

g210:	13939
g211:	404
g212:	DNA
g213:	Glycine max

0223. positive at all n locations  
0400. 10000

[illegible]



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<210> 13942

<211> 443

<212> DNA

<213> Glycine max

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caacatttata gaagagactc tgnaaagtta aaatacaact cataatggtt tcaattgaat 120

atgttaacaat caccaggatg gcattgctgat tgcacaggat gagatctttg gtccagtcaa 180

cccatattat naatcaagta agaaaacaac tagtggtagt taattacttt gcagagaatg 240

gtattatact accatacatg tgttgtgctt tgggcattaa tttttgtgtt gatgaactca 300

gggaacttgg tgaaggtagt catagagcga acaacacacg ttacttggct ggaggaggaa 360

gtgtcacaac gaacatggac actgcaaaca ctttgaacgg ggcaactgaga gttgggaacag 420

tttggataaa ctgctttgac aca 443

<210> 13943

<211> 369

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 13943

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atatatogag atgttctgta ctgaacaaca gaagctctcg agaaattcaa atgttcataa 120

cttttcaactc ggaatgtccaa ttcatgcgca tccatattct agatgtctga aattcatcaa 180

cagaagctct atagaaatgc anatggctat aagtittcac tgggatgtca cattcaggcy 240

cattcacatat cgagacgtc agaattgaac aatggatgt ctcgagatat tcaaatggtc 300

ataacttttc atctgcatgt gtccaattca ggggcattca atatcgagac gctcgataga 360

gaacaaacgg 369

<210> 13944

<211> 443



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 ctctcagcaa attcaaacga caataacatt ttactcggat gctcgattga gtcocgtaat 240  
 attcagaa attcaaat gctctgaa attcaata attcaatt attcaatt  
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<210> 18947  
 <211> 382  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18947

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 aaagacttga aaagactaac cattccttcc atctttgagg taaatngacc accacattgt 180  
 tcttcagtt ttgtcaaaat acttctctca tgatcatcat tggcaactct gtcaaaaagg 240  
 agccttcgag caagcttctt cctacaagca atcacgcaag aacatgtntg actattcttt 300  
 tgcagcctc ttacagtang aaaaaaggta atgatgacac tcaaattagc cacagaaagc 360  
 agaattcaat gatagactac ca 382

<210> 18948  
 <211> 412  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18948

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 tcaaatggct ataaatagtc actcggaggt ccgattcctg ccataaattt atcaagacgc 180  
 tcaaatgtga acaacagaag ctcaagaa attcaaatgg tcaataactt taagtccgat 240

gtcggattca ggcacataat atatcgagac tcacgaaatt gaacaaaggga agctctcgag 300  
 aaattcaaat ggtcaaaaact tttaactcgg atgtccgatt caagcacata atatctcgag 360  
 anglycataa ttgaacaagc gaagctctcg agaaattcaa atggctatac tt 414

<223> unsure at all n locations  
 <400> 18949

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 tgtttctcaa ttagaatttg agttttacct atgtaatat tgttgatctt ttatagaaga 120  
 ttttattaag tggattatca agatgaaaact ccaattctga tgggagaaca acactaaaaa 180  
 cacttaagaa actacacctt agttttgttc ttattttat agtaactttg ttccataaagt 240  
 taactagaatg atcaataaac tacaaatttg tggttgaata ggaactgaga cgtttcccaa 300  
 ctctccaaagc cgaaatagca gcagctacaa atgaggcttt agagagggtc cgogaagaga 360  
 gtaagaagac agctatgcgg cttgtggaca tggaaacctc ctatctcaat gtgg 414

<210> 18950  
 <211> 419  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18950

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 cataacataa gcataagtag taatcttacc acctctagtc tagctatcgg tgcataagct 180  
 taaccaaaga ctatactgtt ttgttggta tagctcttga ctactatcct tgccttatto 240  
 ctagtgtaca aacctgttc attcaattta tttttaaaca ctcaatttagt gtaaatgatg 300  
 ttcattgttt taaaataagg tattaattcc catatatcat ttctttttaa ttgggttgaac 360  
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<210> 18951

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<E11>      391
<E12>      DNA
<E13>      Glycine max
<E23>      unsure at all n locations
<E14>      18951
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[illegible]

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<210>      13952
<211>      334
<212>      DNA
<213>      Glycine max
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<400> 13952

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ctcctctctac	ctgcatcttc	catcaaaagc	tttccaaaac	tataaacgtc	ggccttatat	180
gatactccac	caatattttt	gtagtataat	tctggagcta	tgtagcccaa	agttccaatt	240
gcttcaggta	aaacaagaga	ccctatcttc	acaggatgta	gctttgcaag	tccaaaatct	300
gaaaaccttg	ggatgaagct	ctcatctaga	agaatattgt	gtggettgat	atcaaaatgt	360
agaatttgca	catcacacaacc	ttca				384

<210>	18953
<210>	306
<210>	DNA
<210>	Glycine max

(400) 19953

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ggaatgacctt gatttttcca ggtcccaactt gdaaacccatt tctaccacact acaaaaaccta 120



agaaaaactat attatctaca caaaagggtac acttctctat atttgcatag aggggtgtttt 180  
 tcttaaggat tgaaagaact tgcttgagat gtcttaagt atcatctagg ctcttactgt 240  
 aacttaaaat atgatacaaa taacaacta caactctagg tatdaaatcc cttaagagat 300

<210> 18954  
 <211> 270  
 <212> DNA  
 <213> Glycine max

<400> 18954  
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 ctacttgjaa cccatttcta ccatctacaa aacctaaaga tactatatta tctacacaaa 120  
 aggtacaact ctctatatct gcatagaagg tgttcttctt aaggattgaa agaacttgc 180  
 tgagatgtcc taagtgatca tctaagctcc tactgtacac taaaatatca tcaaaataaa 240  
 caactacaaa tctacctatg aaatccctta 270

<210> 18955  
 <211> 389  
 <212> DNA  
 <213> Glycine max

<400> 18955  
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 tttctggctt cagtaggagt catgtctcca agggctccac cactggcagc atctatcata 180  
 ctctctctca taktactgag tcttcataa aaatatigga gaagaagctg ttctgaaatc 240  
 tgatgggtggg ggcaactggc acatagtttc ttaaattctt cccagtactc atacaggttc 300  
 tctcactga gttgtctaat acctgagata tcttctctga tggctgtggt cctggaagca 360  
 ggcaaaaatt ttcttaagaa tactctctt 389

<210> 18956  
 <211> 429

<212> DNA  
<213> Glycine max

<400> 18956

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tctttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt  
tcaataaata tttttttttt aaactttagg gaagaataga ttgaggagga aaagaataa 120  
gtttaataca attttaaatt caaaaatata attacatag cttaggaat ggaatgaatac 180  
tttaggggat caattataa aaatgcaaaa gatatgtggg atacctaca ggtaacacat 240  
gaagatacaa catatgtaaa aagatctagg ataaatacat tgacacatga atatgaatta 300  
tttagaatg . 360  
419

<210> 18957  
<211> 412  
<212> DNA  
<213> Glycine max

<400> 18957

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ctctctatat gattaacttt ggattttgag tcatacctta tccaaaacta ggcatacatg 180  
actttttata ctggttaaagt ttataaaatt ttgttatatg ataagtataa gttatgcaat 240  
agtttttataa gtactctata gaaggaaaaa aatgtaaact tgagttttaa tataaatttt 300  
taatcagata aatatattta tgtataaatt tggtttgggt tggattagat tgaattttta 360  
aatgaaatcc aaaatctgat tctatccaaa acatatgagt ttgttaaatt tt 412

<210> 18958  
<211> 372  
<212> DNA  
<213> Glycine max

<230> unsure at all n locations  
<400> 18958

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 tctttgtagc tacaatgctt agaataactc tcatggtagt catctttaca attggagaga 180  
 aaatctctat gaaatcaatt ccttghcttc gctgaaatcc tttcaccata agtctctgct 240  
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<210> 19959  
 <211> 403  
 <212> DNA  
 <213> Glycine max

tatgtctaaa acatttataa tagacctct cagtgcatt accaacaaca gcagaataat 60  
 tatgtctctt caggcaacag atataatcta ggttggaga atcatccaaa tctgagatgg 120  
 gcaagtcttc cacaataaca acagcctatc cctcctttcc agaatgttgt tggctcaagc 180  
 aagccatatg tctctctctc aatgcagcag cagacaacaa gcagctgagg cccctctctc 240  
 accttcttg gaggagttag tgaggcaaat gaccatctag aatatgcaat ttcagcaaga 300  
 gacaagagcc tccattcaga gtctaacaaa tcagatgggg atgatggcta ctgagttgaa 360  
 ccaagcttag tcccaaaatt ctgacaaaatt tcttcacaa act 403

<210> 18960  
 <211> 339  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18960

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 atgtcccccga atgggacatc tctgtgaaaa gttatgacca ttctatttctc tctgagagtt 120  
 cctgtgttca atttctgagc tctctatata ttatgacccc gaatctggaca tctgtgtgaa 180  
 aacgtatgac cctctctctc tctctgagc tctctgtgat caatttctgag cgtctatagc 240  
 agttatgttc ccaatctcga cctctctctc aaaacttatg accatctcga ttctctgaga 300  
 gctctctctc gctcaatttctc gaggctctc atataata 339

<310> 18961  
 <311> 294  
 <312> DNA  
 <313> Glycine max

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 jcatataata ttggaagct cyaaaangaa caatggatgc tttagagaaa attaaatggt 180  
 ataatttat aacaggaag tccgatttag ggcataata taccagagag ctcgatattg 240  
 aaatcggaa jcatcaaga aattcatgtg gtgataactt atcacacyga agtc 294

<410> 13962  
 <411> 334  
 <412> DNA  
 <413> Glycine max

<223> unsure at all n locations  
 <400> 13962

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 ttgtcgtggc ttacattgg aatagaatct ggatttgcca cgggctttttt gggattttgt 180  
 tgtgtcattt tcttaatcag aaaatggagg catgcatact tcaagtttct ttatgacttg 240  
 aaagaccaac ttatgtcat ggtggccatc aaaatgaatt cttttcgttg aggtcggaca 300  
 caacataact ggttaagtaaa acctttgatt agttgaaatt tcngttttta ttatacaaga 360  
 taaacataga ccatatttta acat 384

<210> 18963  
 <211> 433  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18963

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 tgcctccaaa gttcatggc ctgtgaggtg aagaccogca caaacatttc aaggaatttc 120

atattgtctg ctccaccatg aaacccccag atgtccaaga ggaccacata tttctgaagg 130  
 cttttctctca ttcattagag ggagtggcaa aggaactggt gtattacott gctccaaggt 240  
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<210> 18964

<210> 18964  
 <211> 397  
 <212> DNA  
 <213> Glycine max

<400> 18964

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 tgggtataga tggatagoga tatttgttga tgattgcaat ccaacgacac gtattgactt 180  
 gatgaaacaa ggatatgatg tggtaacat acttgaacaa tctcatacta tgattcaaac 240  
 tcaatattca aagaagacta cgatccttcg ctctgatacc atgtataact gatatgatat 300  
 ttgcataat ctcaatcgca tcttacaac ggaaatatgt tatatgtata tacacagaca 360  
 acccatgttc taattataac tagatcaga taattat 397

<210> 18965  
 <211> 431  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 18965

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 aacttcttac atcttcccat tgtactctt ttgogtaaat atttgaaagc caaacatgag 180  
 ccacactatt tttaggttca gcttctacca atttgtctgc tgcgaagattg gcccttctca 240  
 tgcctcccatg aatttttcaa cccccaaaga aagaacacca ccccaaacaca tcttatctat 300

aaagtctttct gcttcttttaa gctttccagc tctacctagc aaatcaatag cacaactgta 360  
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<210> Glycine max

<400> 18966

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ccaattggaa aaatctccac aagattgctt gaggggaagg tagccacca tttttcatg 180  
tgccctgaa accgcttga aatcaccat gttaaaccac ggtccaaagga agttgatcag 240  
ctatagaagag agctcatgac ataagattgc tcttttaatg ttggaggttg aaccataaat 300  
agtagctaca taacatgaaa tgttgttaat agaaactaca aaagacatgc tttgatcaga 360  
gatagctaac atagacaagg aag 383

<210> 13967

<211> 393

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 13967

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tttataacg gatgtccggt tgagtcctgt aatatatoga gagcttgcaa attgaaaacg 180  
gaagctcgta ggacattcaa aggacaataa ctttntactc ggatgttcga ttgaaticggg 240  
taatatatcg agacgatcaa aattgagaat agaagctctg agcaaatga gatgacaata 300  
actttatata ctgatgtgag gtgagagccc gtgatatac gagacgctca aaatttagat 360  
ccgaagctct agagagaattg aattgacaat aac 393

<210> 13968

<211> 424



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 atggacatac aaacaccata tatatacgca ctgtaaacgg ccaagacttt agctgataca 180  
 agtgcacatc totatahncr cccctctcttt ctttatatat atgctgpcag attgctcact 240  
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 tctatggac agttacgaaa tctctacatt ctctcgctac tctctctact ctgtatcat 300  
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<210> 18971  
 <211> 401  
 <212> DNA  
 <213> Glycine max

<400> 18971  
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 tctttaaattg ctttagtctg ccataaaaaa caggattatt tgaaatggaa atagctactt 180  
 gattatcaac aagaatctgt gtaggctcct tctgttccat atgtaaatca gcaagtatac 240  
 gcttagcca aataacttga ttcacaactg cagtggctgt catatatact gcagtgcctg 300  
 tagcctttgt ccacagcttc tctggcaact cctttttata caacatacac cttgtcactc 360  
 tcatgatatt tctatcttct tctctcactt gtaccattct a 401

<210> 18972  
 <211> 416  
 <212> DNA  
 <213> Glycine max

<400> 18972  
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<211> 329

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<214> 18974

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<210> 18974

<211> 315

<212> DNA

<213> Glycine max

<214> unsure at all n locations

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ttttgcaaga actatgtagg tctgagttcc tcatcacana tccaggatag gtangagcaa 180

aagccccgct tttgtcgacc accccaagag atcggttaatg gtccaacgcc ttaacgtttc 240

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aaaatcaaaa gatca 315

<210> 18975

<211> 439

<212> DNA

<213> Glycine max

<400> 18975

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gattcggggga cataatatat cgagacactc gaaattgaac aacggaagct ctcattgatat 180

tcgaatgcctc ataacatttc acacgggatgt ccgattcggg gacataaactt atctagacgc 240

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<210> 18977

<211> 435

<212> DNA

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 <212> DNA  
 <213> Glycine max

<400> 18979

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 gacaacgaca atggtaatga gtgatagcag cgataatggt ggtgtttctt atggcgacaa 240  
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 ggatgtgac aatgatgacg acaatgatag tgatgagtgg tgagacactg gtggtgacta 360  
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<210> 18980  
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 <212> DNA  
 <213> Glycine max



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<211> 413  
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 <213> Glycine max

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 <213> Glycine max

<23> unsure at all n locations  
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2023: 100% at all 3 locations

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<223> unsure at all n locations  
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<210> 18991



<211> 307  
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 <213> Glycine max

<223> unsure at all n locations  
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 <213> Glycine max

<223> unsure at all n locations  
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1-

<210> 19000

<211> 433

<212> DNA

<213> Glycine max

<223> unsure at all n locations

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taagatctag atgaaataat atctagatga gatcaaatct aaataatata tagatgagat 180

aaaatctaga taagataaga tctgatagaa taaaattgtc tgctcttttc aagtccaagc 240

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aattagtcca gtaggtccaa ttgataaaac tgcataattan attgacaatt aagcctaata 360

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<211> 294

<212> DNA

<213> Glycine max

<400> 19001

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tgcaaccatac atgaatatgt aactatagaa actctttctg tcatctctgt cccctcccca 240

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<210> 19002  
 <211> 273  
 <212> DNA  
 <213> Glycine max

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 ttcctctcga atctctcga cttcaacgaa tgagctntaa tagaaagctc agtacagcgt 180  
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<210> 19003  
 <211> 461  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
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 accatttccc cctgcctatc attgaccaga tgccttgaatg cctggcaggt aaatctcact 240  
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 acaacaccac attcaaccag ccttcggaa ctttggccta tagaaggatg cctttcggtc 360  
 tctgcaatgc ccttggtacc tccaagcgga gcatgattag tattttcagt gattttgtag 420  
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<210> 19004  
 <211> 417  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 19004

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 ctccagactt ctccagtttc aggtgattat ttccagtttc agctgatttt ctttgcattt 180  
 ctccagactt ctccagtttc aggtgattat ttccagtttc agctgatttt ctttgcattt 240  
 ctccagactt ctccagtttc aggtgattat ttccagtttc agctgatttt ctttgcattt 300  
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<210> 19005  
 <211> 429  
 <212> DNA  
 <213> Glycine max

<220> unsure at all n locations  
 <400> 19005

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 atctcgggta agatgggttg tgttgtagct gattgtgtgt ttgtttccac tctaattatg 180  
 aagaagggtgc tagaggggct cctatgtaga agacgacgca gttgcgaggg agacacgggt 240  
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 atggatggag acgtgtagtc tgcagaacc ggtcctaatt ttntgagcca ttgcactccc 360  
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 tgcacctgt 429

<210> 19006  
 <211> 441  
 <212> DNA  
 <213> Glycine max

<220> unsure at all n locations  
 <400> 19006

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 cataattgga aaaattctac ataattatct agtcataatt catctatatat agcataaatt 180

ttttgacttt taaaataatt taaacagtta ttttaattata taattaaatg ataatatataa 240  
 aatatttcac attgtatcag cattaacctc ctgcttccgg cttttgtgta caacatggag 300  
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<210> 19007  
 <211> 276  
 <212> DNA  
 <213> Glycine max

<400> 19007  
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 taaactcaac attcctccat ttaaaggaaa gaatgatccg gaggcctact tggagagggga 180  
 gatgaaaata gagcatgttt tctcatgcaa caactatgag gaggaccaa aggtgaagct 240  
 tgcgcgcaag gagttttccg actatgctct tgtgtg 276

<210> 19008  
 <211> 439  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 19008

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 aattgaatta agaaaaaaaa ttgatcataa tgattttatcc ctttaggtat aatacaatac 180  
 caaaattgaa atatttatag catattaggt ctacaatttt tattcttaca atcttaaaaa 240  
 ataattcatc ttattatgta tgtcttccca gatccaatat gcaataaata tatcaatttt 300  
 agccttccac catatctaaa ggaataaacc atntaataat aatgactatg caatttatg 360  
 tgaatgataa aattagtttg tgggtacata atcaattata aaaaacatac attttatat 420  
 ttttaatttaa cctataaatt 439

<210> 19009  
 <211> 314  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations

<400> 19010

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 ttggtaagc aaaaagaatg agtctggcta ttggttggg gagttgaatc aatggttntc 240  
 ttatttgaca ttaacaagg ttcttcagat ggtcgttgga aagcgacttt tcnctgctac 300  
 aactatgaat gatg 314

<210> 19010  
 <211> 335  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 19010

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 acatgcaaga caaaattgat tgcaataata aatgagataa gggaagagag aaatataaac 120  
 tggatttata ctggttcggc cactccccgt gcttacgtct agttctcaag caaccactt 180  
 gagattntcc ttctcttttg taaaaccctt ttacaaagtt tgaaccacac agggaacaacc 240  
 catcccttgt gttcagaaat tcttacaact taagagaccc tcagtctctt aatcaatctc 300  
 ttgattaag aagaagaaga agaagaattc tctcttttaa gagaaagata atacaatgaa 360  
 gtccataaa ctcttaatat atttg 385

<210> 19011  
 <211> 338  
 <212> DNA  
 <213> Glycine max

<400> 19011

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